

FEATURES



Fox fights bone marrow cancer and wins

Superior Court Judge Carl Fox is back on the bench after a cord blood transplant saved his life.



The Williams major gift advances cancer research

"We have faith scientists will unlock mysteries behind this disease."



Clinical trials lead to new treatments

Amy Charney didn't let breast cancer stop her from reaching the finish line.



Opening up the lines of communication

Basch lab receives \$5.45 million to study patient-reported outcomes.

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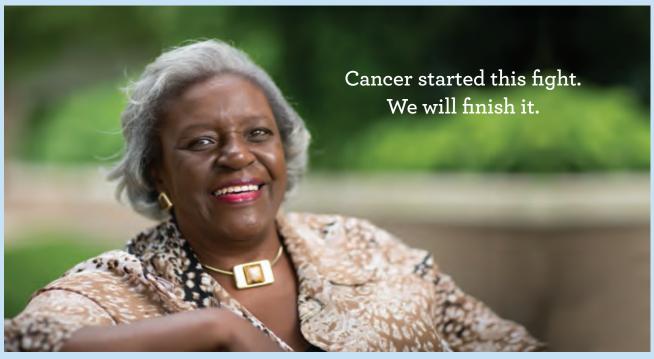
Ashley, neuroblastoma, non-Hodgkin's lymphoma



Eric, lymphoma



Trent, natural killer cell leukemia



Elaine, breast cancer



Rengate, head and neck, lung, and prostate cancer



Coach Hatchell, leukemia



Jo Anne, ovarian cancer



Inventor and Apple, Inc. co-founder Steve Jobs once said, "I want to put a ding in the universe." As a researcher and physician, that's how I feel about cancer. I truly believe our work at UNC Lineberger Comprehensive Cancer Center is making the kind of significant impact to which Jobs was referring, and your generosity helps make that happen. Day in and day out, our team strives to unlock the mysteries of a disease that claims nearly 600,000 lives in the U.S. annually. But we couldn't do it without you.

If there's a song title that describes this past year at UNC Lineberger, it's "On the Road Again." During the last twelve months, we've taken our cancer center's powerful story across state lines to places like Palo Alto, California, a city teaming with high-technology companies seeking out early investment opportunities. We've also shared our work with new groups of potential donors in Palm Beach, Florida, who, like you, know a good investment when they see it and want to be a part of an organization that can make the world a better place for generations to come.

Cancer is a costly disease, and new philanthropic commitments will be key to the future success of UNC Lineberger. We recently set a preliminary fundraising goal of \$200 million from private sources over an eight-year period as part of the university's larger capital campaign. That goal represents significant growth in yearly fundraising results and is befitting an institution of our caliber. Thanks to you, our fundraising is pushing the pace and keeps UNC Lineberger on its amazing trajectory.

This year's Donor Honor Roll is filled with inspiring stories of scientific discovery, as well as thrilling accounts of hope, survival and appreciation from patients and families who have become a part of our growing Lineberger family. We've also featured some of the 6,520 donors who helped us raise more than \$29 million during the last fiscal year – a truly amazing feat. It's taken all of these people to make UNC Lineberger the top cancer center in North Carolina, and I'm personally grateful to each and every one.

With thanks for all that you do -

Norman E. Sharpless, MD

Director, UNC Lineberger Comprehensive Cancer Center







FOX FIGHTS BONE MARROW CANCER AND WINS

uperior Court Judge Carl
Fox has been a fixture in
Orange and Chatham
County courtrooms since
1978, when he first began
his law career as an assistant district
attorney. "After nearly 40 years of
practicing law in the same
community, I've made many, many
friends and a few enemies along the
way," Fox says, laughing as he recalls
some of his high-profile cases.
"Overall, it's an extremely rewarding
career and a real honor to serve."

But in the spring of 2015, Fox worried that he might not be able to go back to the bench at all. For months he'd been losing weight, he tired easily, and his leg bothered him so much he'd begun limping. His internist, Tim Carey, MD, ordered lab work and found that Fox's platelets were low. He was admitted to the hospital. "After more tests, I was diagnosed with myelodysplastic syndrome (MDS), a form of bone marrow cancer, and I knew it wasn't good."

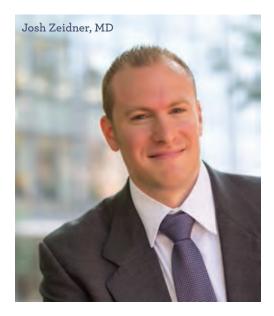
Within weeks, Fox was transferred to the N.C. Cancer Hospital under the care of Josh Zeidner, MD. Given Fox's diagnosis of MDS and severe blood count abnormalities. Zeidner began treatment with a chemotherapy called Azacitidine and referred Fox to see Thomas Shea, MD, to consider a bone marrow transplant. Shea, a UNC Lineberger member, professor of Hematology and Oncology at the UNC School of Medicine, and director of the UNC Bone Marrow and Stem Cell Transplantation Programs, says Fox suffered from bone marrow failure, meaning his bone marrow was not producing red blood cells, white blood cells, or platelets effectively.

"In high-risk forms of MDS, like Carl's case, a bone marrow transplant is recommended and represents the only chance to provide a cure for this disease," says Shea. "Unfortunately, when we researched the national bone marrow donor registries, there was no bone marrow match for Carl."

While Fox initially tolerated the chemotherapy treatment well, his blood counts did not improve. Then he developed complications of MDS, including multiple hospitalizations for infections, and it was clear the chemotherapy was not helping his disease. However, there was another treatment option: a cord blood transplant. This type of blood donation is collected from the placenta and umbilical cord after a baby's birth. The cells are then tested, frozen, and stored as a cord blood unit at a public cord blood bank for future use.

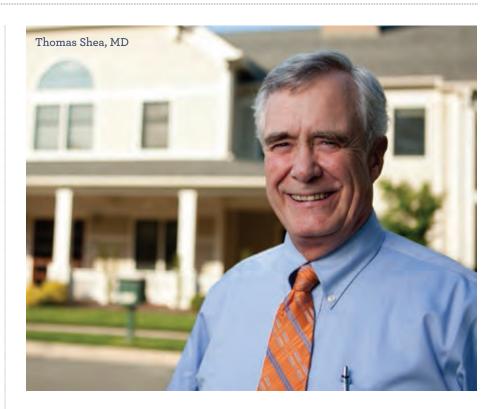
Shea was thrilled to find two cord blood units on the registry that were a close match for Fox. The units were immediately shipped from New York to North Carolina, and Fox's medical team began preparing him for the transplant. This meant completely wiping out his immune system with chemotherapy and full body radiation so the new, healthy cord blood stem cells could be infused and begin reproducing on their own. On September 30, 2015, Shea performed Fox's cord blood transplant.

After Carl's transplant, he suffered significant weight loss," says Zeidner, a UNC Lineberger member and assistant professor of Hematology and Oncology at the UNC School of Medicine. "But with good nursing care, he began to recuperate, steadily putting on pounds and regaining his strength. He was discharged after a lengthy stay in the bone marrow transplant unit.



Over the following months, with rest and TLC from his long-time partner, Julia Smith, Fox continued his recovery. His white blood cell and platelet counts went up; the cord blood transplant had been a success. Fox returned to the courtroom on July 11, 2016.

"I'm in complete remission, I'm back at work, and I'm living my life, thanks to the care I received at UNC Lineberger," says Fox. "I'm so grateful to have a world-class cancer center right here in my own back yard, filled with people like Dr. Shea and Dr. Zeidner who go to great lengths to help and heal their patients. Words can't express my gratitude."



SHEA NOMINATED FOR PROFESSORSHIP

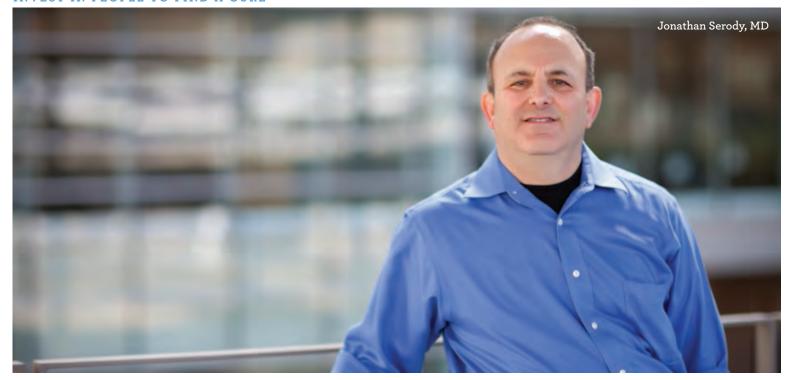
Private funds to support both established faculty and junior researchers are critical as we develop the best and brightest physicians here at UNC. We are grateful to The John William Pope Foundation for its \$1 million gift to UNC Lineberger to fund cancer research and treatment through the creation of the John William Pope Distinguished Professorship in Cancer Research.

Thomas Shea, MD, has been has been nominated to be the first recipient of this professorship. Shea was one of the late John William Pope's physicians when he was treated for cancer in 2006 and is an international leader in the care of patients with hematologic malignancies such as leukemia, lymphoma, and multiple myeloma.

"I am humbled that the Pope family chose to make such a significant gift in my honor and pleased to be considered as the first recipient," Shea said.

With this professorship, Shea hopes to expand research surrounding hematologic malignancies and lay the foundation for Lineberger's continued excellence in transplant and blood cancer initiatives.





SEED GRANTS YIELD RETURN ON INVESTMENT

he Seed Grant Program at UNC Lineberger gives skilled researchers the opportunity to find answers to some of cancer's biggest challenges and develop promising new concepts for basic cancer research, clinical care, prevention, early detection and survivorship. An increasingly competitive funding environment has magnified the need for and impact of investments in this type of innovative research.

For UNC Lineberger physicians and scientists, seed grants not only yield early results; they also help develop the ideas that grow into large, federally funded projects aimed at transformative breakthroughs in cancer care.

Serody: "Grants were pivotal"

Jonathan Serody, MD, had just completed a fellowship in clinical bone marrow transplantation at Fred Hutchinson Cancer Research Center in Seattle, Washington, when he was offered a faculty position in the Department of Medicine at UNC. "My wife did her undergraduate work at UNC, and I really liked the area," says Serody. "We agreed that Chapel Hill would be a great place to raise our children, so in 1993, we moved across the country and became Tar Heels. We've been here ever since."

Funded by private support and state funds, seed grants have helped UNC become a top 10 institution for research funding.

In his early days at UNC, Serody was the recipient of several small research grants that proved to be pivotal in his career. "Oftentimes, if you're just starting out in research or you're new to an area, a small grant can help fund experiments and produce enough data to spur larger investments from other institutions and organizations. There's a real multiplying effect," explains Serody. "Unfortunately, even if a researcher's findings are novel, even groundbreaking, if they don't have enough money to pay for their research, it's difficult for them to validate their work to potential financial suitors."

Serody is now the associate director of translational science at UNC Lineberger and a medical oncologist in the UNC Lineberger Leukemia and Lymphoma Multidisciplinary Care Program. When asked why he's stayed at UNC Lineberger for 26 years, Serody says his family has put down roots here, and he's had the opportunity to work with some amazing people. "But to be a successful researcher, that's not enough," Serody explains. "I've stayed here at UNC because of their commitment to supporting advanced research. It has been critical to my work and the resulting accomplishments."

MONTY AND NANCY WHITE

Putting down roots, planting the seeds of discovery

onty and Nancy White met as undergraduates at UNC-Chapel Hill, and like most Tar Heels, the couple's devotion to the place we call "Blue Heaven" has become stronger through the years. "Even after we graduated from Carolina in 1970, we found ourselves coming back time and time again, attending sporting events and enjoying the company of good friends," says Nancy. "We have roots here. It's always been our homeawav-from-home."

Monty grew up in Raleigh, working in his grandfather's automotive parts business during summer vacations and in the years following his graduation from UNC. The family eventually sold the automotive parts business to CARQUEST, and then in 1987, he and his brother Bill, also a UNC alum, began a real estate company called White Oak Commercial. "That's when Nancy and I began investing more of our time, energy and resources into the academic and research needs of the university."

For years, Nancy has been active on various UNC boards, including The Institute for the Environment and the College of Arts and Sciences. In 1998, Monty and Nancy were asked to join the UNC Lineberger Board of Visitors, and they happily accepted



the invitation. "Cancer has directly affected our lives in very personal ways," says Nancy. "Monty's father died of lung cancer when he was 71, and I lost my mother to the same disease when she was just 69. My father passed away from melanoma at age 93. As you can imagine, UNC Lineberger's cancer research is a cause near and dear to our hearts."

In 2003, Monty and Nancy established the White Seed Grant Fund, which was designed to provide seed grant support for UNC Lineberger faculty research. The couple agrees it is one of the smartest investments they've ever made.

"When Nancy and I attend Lineberger board meetings, we get excited hearing about cutting edge technology, new clinical trials and lives being saved," says Monty. "We realize there is hope. Researchers and physicians are making progress in fighting this horrible disease, and scientific breakthroughs are happening right here in Chapel Hill. We want to be a part of that success. One day our seed grant fund could help spark a discovery that leads to a cure. That is money well-spent."



VALVANO HONORED FOR WORK TO FIGHT CANCER

NC Lineberger hosted its 2nd Blue Ribbon Gala on September 18, 2015, gathering more than 400 people to celebrate advancements in cancer care at UNC. A select few were honored at the black-tie event who have made significant contributions to UNC Lineberger in the fight against cancer, including Nicholas Valvano, president emeritus of The V Foundation for Cancer Research.

Valvano is the eldest brother of the late N.C. State University basketball coach Jim Valvano, who founded The V Foundation for Cancer Research after being diagnosed with cancer at the young age of 46. Nicholas served as chief executive officer of The V Foundation for 13 years (1999-2012) and has been a member of the Board of Directors since its inception. Under his leadership, The V Foundation

established relationships with several cancer centers nationwide – including UNC Lineberger – and awarded more than \$100 million in grants across 38 states. The Foundation proudly awards 100 percent of direct cash donations to cancer research and related programs, continuing Coach Valvano's legacy and his inspiring words, "Don't give up...Don't ever give up!"

Perou awarded V Foundation Grant, matched by others

Chuck Perou, PhD, a UNC
Lineberger member and worldrenowned researcher in the field of
genomics and breast cancer, was
honored to receive a 2015 V
Foundation "Partners in Excellence
Collaborative Grant" for \$250,000.
The award was matched by a
\$250,000 gift from long-time donors
and UNC Lineberger Board of
Visitors members Wally and

Lil Loewenbaum and Neill and Linda Currie, for a total of \$500,000 in cancer research funding.

"We are extremely grateful for this funding, which will allow us to pursue a novel form of research called immunogenomics," explains Perou. "By approaching the immune system from a genomics perspective using DNA and RNA sequencing, we can now sample tumors and study the immune response in hundreds of individual patients at a personalized level never seen before. This is all a part of our quest to harness the power of the immune system to fight tumors."

Perou says this type of matching gift provides researchers greater freedom to pursue high risk, high reward translational research, as opposed to government-based funding. It is this type of intellectual freedom that drives innovation and is most likely to result in novel findings of high importance that directly affect cancer patients.

VS. CANCER FUNDS PEDIATRIC CANCER RESEARCH

hase Jones was a freshman at UNC-Chapel Hill when he was diagnosed with stage IV brain cancer. After being successfully treated at UNC Lineberger, he started his own non-profit organization called the Vs. Cancer Foundation with the goal of fundraising for pediatric cancer research and supporting the needs of patients and families during treatment. Since 2013, Vs. Cancer has generously granted UNC Lineberger more than \$245,000, including the most recent gift of \$115,000 to support UNC pediatric cellular immunotherapy trials and research, and specifically, the work of Barbara Savoldo, MD, PhD.

Chase, tell us why you've expanded the scope of Vs. Cancer research funding to include pediatric immunotherapy.

It's very rewarding to me to be able to give back through Vs. Cancer to the cancer center that saved my life. Knowing that UNC Lineberger, where I was treated, is a public hospital and serves everyone, regardless of their ability to pay, is really amazing, because it's one of

the best research facilities in the world. Immunotherapy is a promising tool that will provide hope to many pediatric cancer patients who have no other treatment options, and as a cancer survivor, it's humbling to play a role in Dr. Savoldo's research to help these kids.

Dr. Savoldo, what does it mean to be able to offer immunotherapy treatment here in North Carolina?

Patients can be treated closer to their home, which lightens the load for the entire family, both financially and emotionally. It is always a struggle for parents to stay with their sick child during therapies while they try to continue working to financially support the needs of the other members of the family: having to travel to another state for treatment only compounds that problem. Treatment at UNC also makes life easier during a very difficult diagnosis, enabling loved ones to provide the emotional support system that is particularly critical for the family, including hospital visits, home-cooked meals, housekeeping, childcare and transportation for siblings.

Chase, in addition to this research gift, you've also made a very generous donation through Vs. Cancer to replace/repair items in the N.C. Cancer Hospital Pediatric Oncology and Hematology Clinic.

Our whole goal for Vs. Cancer is to fund local research and to help kids have the best experience possible in the Peds Oncology Clinic. Part of our gift will be used for up-fitting the technology that operates interactive games in the clinic waiting room. We're also repairing the clinic's kidsized racecar so children can continue to play, have fun and, as much as possible, enjoy their visit to the N.C. Cancer Hospital. To think that we can help provide a positive environment for children who are going through this disease is extremely rewarding.

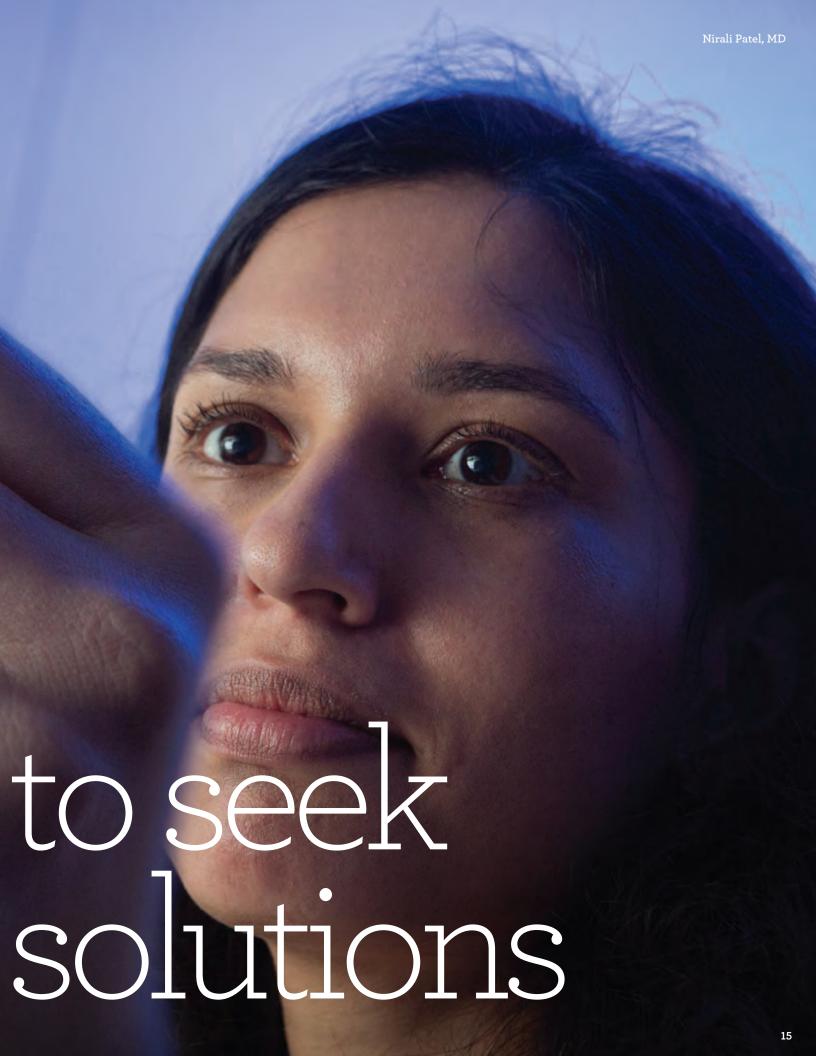
Dr. Savoldo, what kind of impact do donors like Chase Jones and Vs. Cancer have on your research?

Although we have made great progress in treating certain pediatric cancers like leukemia, there is still much work to do in our fight against resistant solid tumors in children. However, childhood cancer research is vastly underfunded, which is a tragedy, as these children have their entire lives ahead of them. As a researcher, I see this not only as a challenge, but also, as an opportunity to help save lives. Philanthropic support from donors like Chase Jones and Vs. Cancer will help in translating our continuous lab discoveries and studies into the clinic as cures for children.



Vs. Cancer team From L to R: Brant Masters, Tiffany Drummond Armstrong, Kathleen Kenney, Chase Jones (founder), Ashleigh Kincaid, and Eric Stahl.







KEN AND CHERYL WILLIAMS MAKE \$10 MILLION GIFT TO ADVANCE CANCER RESEARCH

en and Cheryl Williams were overwhelmed with gratitude when dozens of their colleagues, friends and family members gathered on Thursday, January 21, 2016, to celebrate the naming of the N.C. Cancer Hospital lobby in memory of the couple's beloved son, Tony Williams. The occasion was bittersweet, as Ken and Cheryl's son passed away just four years ago, but it was also the celebration of a transformational \$10 million gift the couple believes will provide hope to families facing potential heartache.



"When you look back on your life, you have to ask yourself, 'Have I done what I can to help others? Is this world a better place because I was here?' Those are big questions, but cancer is a big disease."

- Cheryl Williams

"The pain of losing Tony is a sorrow that will always be a part of our lives," Ken says. "Cheryl and I hope that through our gift to UNC Lineberger, and because of the life-saving cancer research it will fund, eventually, other families won't have to experience the suffering that accompanies the loss of a loved one."

Through the Ken and Cheryl Williams Fund for Venture Initiatives at UNC Lineberger, the couple chose to make the extraordinary gift of \$10 million to fund cancer research initiatives that hold the greatest promise for cures. The gift is unrestricted, giving leaders of the cancer center the greatest flexibility to earmark the funds for emerging research opportunities that can make the greatest impact against cancer.

"I spent my professional career in pharmaceutical research," explains Ken, who retired as a senior vice president from Quintiles, the world's largest provider of commercial outsourcing services and biopharmaceutical development. "So I've always been interested in new, cutting edge treatments and therapies. That's one of the things UNC Lineberger is known for being a world-class leader in cancer research - so Cheryl and I were very interested in finding a way we could support the cancer center's mission. Also, we both have personally suffered loss due to cancer, so we're passionate about the quest for cures. We have faith that researchers will eventually unlock the mysteries behind cancer, and there's no reason those discoveries can't be made right here in Chapel Hill, North Carolina."

Williams gift supports \$200 million goal

Ken and Cheryl's generous gift played a pivotal role in UNC Lineberger fundraising success during the 2016 fiscal year, which totaled a record \$16.2 million in



philanthropic gifts and new commitments. The cancer center also secured \$12.9 million in grants from corporations and private, nongovernmental foundations. This brought the total funds raised from private sources to more than \$29 million for a second year.

"Every day, our care providers and scientists commit themselves to the pursuit of today's best care and tomorrow's best hope," says Martin Baucom, senior executive director, UNC Lineberger Development and Communications. "Ken and Cheryl's gift demonstrates a similar level of commitment to fighting cancer. They've set a lofty leadership standard for what philanthropy can do to advance the life-saving mission of UNC Lineberger, and their sense of timing couldn't be better. We are viewed nationally as a cancer center on the move, and we are also in the early stages of an eight-year fundraising campaign. Ken and Cheryl's philanthropy harnesses our tremendous momentum and will inspire additional investments throughout the campaign. That's what leadership is all about."



IMMUNOTHERAPY: BREAKING BARRIERS, BEATING CANCER

or decades, scientists have been trying to figure out how to use the body's own immune system to fight off cancer. After all, our immune systems can fight off all kinds of other health threats, so why not this disease? But nothing seemed to really work – that is, until the 1990s, when researchers began expanding the use of a treatment called immunotherapy that resulted in slowed tumor growth and longer patient survival rates.

An important part of the immune system is its ability to tell the difference between normal cells in the body and those it sees as "foreign." This lets the immune system attack the foreign cells while leaving the normal cells alone.

However, scientists recently discovered that cancer has the ability to put on what some call an "invisibility cloak." Simply put, cancer can disguise itself and prevent the immune system's attack, which keeps the patient's body from healing. Fortunately, thanks to a breakthrough in therapies called checkpoint inhibitors, scientists have found a way around one part of the invisibility cloak.

Checkpoint inhibitors are drugs that turn off the invisibility cloak so some cancers can't hide from the immune system. Researchers are thrilled that these drugs seem to be working for up to one quarter of patients with advanced cancer — melting away the toughest tumors, such as some melanomas, which are the deadliest kind of skin cancer.

Janet Mazzurco: "Dr. Collichio never gave up hope."

Janet Mazzurco's seven-year battle with melanoma began with a simple biopsy at her dermatologist's office in December 2009. What she thought was a small spot on her right arm - just the size of a pencil eraser turned out to be an extremely deep melanoma that required surgery under general anesthesia. "My surgeon had to cut through muscle to get the cancer, removing three lymph nodes in the process," says Janet. "Those lymph nodes were negative, but I decided to come to UNC Lineberger for a second opinion."

When UNC oncologist Fran Collichio, MD, did a PET scan on Janet, the results showed no visible signs of cancer, so Janet returned home to Greensboro, believing her bout with melanoma was over. But on July 4, 2014, she awoke with a splitting headache. "I went to our local emergency room the following day, where they performed a CT scan," Janet explains. "They told me I had a large tumor on the back of my cerebellum. I was terrified."

"Studies are being done on the combinations of these checkpoint inhibitor drugs so that in the future, doctors can determine the best course of treatment for each specific patient."

- Fran Collichio, MD

A month later, neurosurgeon Henry Elsner, MD, removed the mass on Janet's brain, and pathology reports confirmed Janet had stage IV metastatic melanoma. Within weeks, she underwent stereotactic radiation surgery, a targeted form of radiation to obliterate a small remaining lesion without subjecting her entire brain to unnecessary treatment. Unfortunately, subsequent scans showed the lesion had doubled in size, and in December 2014, her surgeon operated again. "Still, the cancer grew, and I was getting

sicker," Janet says. "There was nothing else my Greensboro medical team could do, so I came back to see Dr. Collichio. She ran more tests and found the cancer had spread to my liver and lungs."

As luck would have it, a checkpoint inhibitor drug called Ipilimumab



(known commercially as Yervoy) had just come out of clinical trials and was approved by the Food and Drug Administration (FDA). Collichio immediately prescribed a series of four treatments – each four weeks apart – that began in January 2015. By May, Janet's tumors began disappearing.

"I was very pleased with Janet's progress," says Collichio, a UNC Lineberger member and clinical professor of Hematology and Oncology at UNC – Chapel Hill. "After four months, her scans showed obvious disease regression, and by March 2016, there were no visible tumors. Her LDH levels, which are markers we use to evaluate a patient's response to treatment, fell into the normal range. I was thrilled to give Janet the news: she was in remission."

However, Janet's recovery wasn't without its struggles. After her last treatment, she was plagued by colitis, which is a known side effect of Ipilimumab. "I was hospitalized four times because I was so sick, but, thankfully, steroid treatments were effective. And other than having a bit of fatigue, I've done really well."

Janet is slowly but surely returning to the things she loves to do. She and her husband Tony own a marble and tile company as well as a home renovation and construction business. Public service is also high on Janet's list of priorities. She was just reappointed to a three-year term on the Greensboro Zoning Commission, and she proudly serves on UNC's CCNE board as a patient advocate, sharing her first-hand experiences as a metastatic melanoma survivor.

"I'm a survivor because of my faith in God, and I also have great faith in Dr. Collichio," says the 56-year-old. "She is absolutely amazing – an attentive, compassionate, brilliant doctor. But there's no ego. She's always treated me as an equal, and she respects my thoughts and opinions. Most importantly, Dr. Collichio never gave up hope, and as someone who knows what it's like to face cancer, that's all I could ask for."

CANCER: IT'S ALL IN THE GENES

ccording to the
National Cancer
Institute, inherited
genetic mutations
play a major role in
about five to 10 percent of all
cancers. At UNC Lineberger, our
Cancer Genetics Program provides
consultations and risk assessments
for people who have a strong,
inherited predisposition to having
cancer.

The following patient profile features Beth Silverstein, a remarkable young woman who was told that, because of her genetic profile and family history, she had an 80 percent risk of getting breast cancer and a 50 percent risk of getting ovarian cancer. Beth's parents, John and Leslie Silverstein, serve on UNC Lineberger's Board of Visitors.

Silverstein finds health, hope and freedom at UNC Lineberger

When Beth Silverstein looks into the mirror, it's easy to see her resemblance to her mother, Leslie Silverstein. However, while the similarities in their outward appearances are obvious, Beth didn't know if she had inherited her mother's genetic history that predisposed her to cancer.

"We are of Ashkenazi Jewish decent, an ethnicity with a much higher risk of certain gene mutations that frequently lead to breast and ovarian cancer," explains Beth. "My grandmother died at age 36 of breast cancer, and my mother was diagnosed with the same disease at age 39. My mom went through

genetic testing because so many of our family members had battled various kinds of cancers, and she encouraged me and my sister Amy to be tested as well."

When Beth's genetic results came back, she learned she had tested positive for the BRCA1 gene mutation, the same mutation her mother and grandmother had. She was heartbroken.

Next Steps and Choices

In April 2008, Beth came to UNC to meet with James P. Evans, MD, PhD, a UNC Lineberger member and Bryson Distinguished Professor of Genetics and Medicine, along with Catherine Fine, MS, CGC, a genetic counselor. "We reviewed Beth's genetic results and mapped out her family history, and we determined that her risk for developing breast



cancer was in the upper 80th percentile," explains Evans. "Catherine and I discussed her options with her, which included having a bilateral mastectomy, or she could choose enhanced surveillance consisting of regular visits to our high-risk breast cancer clinic for periodic breast exams, mammograms and MRI's."

But that wasn't the only difficult decision Beth would have to make. Due to her genetic history, Beth had a 50 percent chance of developing ovarian cancer. During their counseling session, Evans explained to Beth that as she aged, her risk would substantially increase. "As a geneticist, I become very nervous when patients like Beth reach their mid-40s and have not taken preventive measures," says Evans. "Unfortunately, there are no good modalities for detecting early-stage ovarian cancer; the symptoms are vague at best and often mimic other health issues. Once a woman has the disease, it can be extremely difficult to treat."

Beth was overwhelmed by the news but decided to approach the situation with a positive attitude. To protect her fertility, she chose to go through egg retrieval and then to have the eggs frozen for later fertilization and implantation. Then in 2014, Beth met with oncologist Carey Anders, MD, and surgical oncologist, David Ollila, MD. After an extensive review of Beth's case, Ollila recommended she have a bilateral mastectomy. While the recommendation may seem aggressive to some, Ollila says the opposite is true in BRAC gene mutation carriers.

"Surveillance is not the same as prevention. Obtaining annual breast imaging only serves to try to detect the cancer early. It doesn't prevent the cancer from forming. If Beth had chosen to forgo surgery and decided instead to take a wait-and-see attitude, it's very likely that at some point in the near future, we would be discussing a cancer diagnosis, followed by surgery, radiation and chemotherapy. And that's IF we caught it early enough. Beth didn't make this decision lightly; it was a thoughtful, rational choice, and a wise one, in my professional opinion, supported by concrete genetic evidence."

On February 3, 2015, Ollila performed Beth's bilateral mastectomy, and Beth's reconstruction surgery was completed in the summer of that same year. She also met with Evans and Fine again, this time to review her lab work and to further discuss the surgical removal of her ovaries.

In February 2016, Beth had a salpingo-oophorectomy, which is the removal of the fallopian tubes (salpingectomy) and ovaries (oophorectomy). The two-and-a-half hour surgery went well, but it immediately sent Beth into menopause. She's now dealing with the after-effects that include hot flashes, insomnia and "foggy brain." But for Beth, this is the new normal. While the surgeries have changed her, both physically and emotionally, she feels empowered as she enters the next decade of her life.

"Some people ask me why I decided to take, what they perceive to be, such radical steps. I won't lie, it was hard," she says. "But the moral of this story is that you need to know your family history, and recognize that genetics affect every generation. I'm not a victim; I took control of my health, making the choices that were right for me. Now I get to live my life without fear of what's going to happen. That's liberating."

SILVERSTEINS HONOR EVANS WITH GIFT TO LINEBERGER

John and Leslie Silverstein were introduced to UNC Lineberger in 1988, the same year Leslie was treated for stage I breast cancer. "We attended a Lineberger fundraising event, where we heard (former UNC Lineberger director) Shelley Earp, MD, talk about the groundbreaking research taking place at the cancer center," says Leslie. "We were fascinated, and we joined the Board of Visitors soon after, serving on various committees."



Then, in 1990, Leslie was diagnosed with stage IV lung cancer. Her lung was removed, and since there was no evidence of any more disease, she was treated with Tamoxifen. She remains cancer-free. Meanwhile, cancer struck the Silverstein family again in 2015, when John was treated for prostate cancer.

"We have experienced cancer in very personal ways, and, of course, our daughter Beth has gone through a series of surgeries to protect herself against the disease," Leslie explains. "John and I are very grateful for the care our family has received at the N.C. Cancer Hospital, and we wanted to make a gift to express our appreciation. When we considered the incredible work Dr. Jim Evans is doing with genetics and how it has directly affected our family, we chose to make a naming gift in his honor. UNC Lineberger is fortunate to have him on their team."

ARTIFICIAL INTELLIGENCE:

A tool for solving questions about cancer

artnerships – both
local and global – play
a key role in UNC
Lineberger's success as
a comprehensive cancer
center. We frequently collaborate
with individuals or organizations
to achieve goals that may otherwise
be unattainable if pursued
independently. The ultimate purpose
of our partnerships is to seek
scientific solutions that provide the
best possible cancer care to our
patients.

Within the last year, our partnership with IBM/Watson has been extremely productive and shows great promise for the future use of artificial intelligence at UNC Lineberger. Watson is a technology platform that uses natural language processing skills to understand grammar and content, process large amounts of "big data," and then, based on evidence and the quality of the information it's given, it's able to present answers and solutions to questions or problems. You may remember Watson as the computer that played on the game show "Jeopardy!" a few years ago.

Hal McAdams: Back on the greens, back to life

Hal McAdams loves to play golf, and if the weather is good, most days

you'll find him at the Greensboro
Country Club, decked out in his
finest haberdashery. He's a fixture on
the course, having served on the
club's board of directors for years.
But in 2014, Hal put away his golf
clubs and made his way to UNC
Lineberger for a second opinion after
being diagnosed with advanced
bladder cancer.

"I wasn't feeling well, and after running some tests, my family practitioner referred me to a local urologist," explains the 75-year-old retired furniture merchandiser. "The urologist found a tumor and removed it, but he was unable to get all the cancer. I came to UNC to discuss my treatment options."

Hal met with Billy Kim, MD, who soon began treating his stage III bladder cancer with a standard of care chemotherapy. But Hal's cancer progressed, and the medicine caused him to become very ill. After more testing, Kim recommended surgery to remove Hal's bladder.

"Following the procedure, I sent a biopsy of Hal's tumor to be sequenced – or de-coded – through UNCseq, comparing it to normal tissue samples," says Kim. "That analysis told me that Hal would very likely respond well to a drug called Everolimus (commercially known as Affinitor), which is FDA approved for other cancers, but not for bladder cancer. Hal agreed to try it, and he had a wonderful response. He immediately started feeling better, and subsequent scans showed a reduction in the cancer that was originally in his lymph nodes. But to be honest, we didn't know why."

In December 2015, IBM's Watson gave Kim his answer. "I took the sequencing data from Hal's tumor biopsy and ran it though the Watson technology. Within 24 hours, Watson was able to provide a scientific explanation as to why Hal was considered an "exceptional responder." That's the value of Watson," Kim says. "It's can quickly extract key information from a huge amount of scientific data and reveal insights, patterns, and explanations that we might not have discovered on our own."

These days, Hal is back on the golf course, and he is extremely grateful for the care he continues to receive at UNC Lineberger. "You know, it's sort of ironic," the UNC alum ('65) says. "When I was an undergrad at Carolina, I shared a house with one of the Lineberger boys. Now I'm being treated at the cancer center that is his family's namesake, and I wouldn't want to be anywhere else."





SECTION THREE

Build clinica researed to advance







CLINICAL TRIALS LEAD TO NEW TREATMENTS

linical trials are an important step in discovering new treatments for breast cancer and other diseases, as well as new ways to detect, diagnose, and reduce the risk of disease. While clinical trials provide evidence of what does and doesn't work for patients, trials also help researchers and doctors decide if the side effects of a new treatment are acceptable when weighed against the benefits. On average, a new medicine to treat breast cancer has been studied for at least six years and sometimes, many more - before a clinical trial testing the efficacy of the medicine begins.



Who says you can't go home?

Amy Charney, a wife, mom and avid runner, had already registered to run the 2015 Boston Marathon when she was told she had breast cancer. But her diagnosis didn't stop her from reaching the finish line.

Amy's diagnosis came as a complete surprise back in November 2014, when her family was getting ready to celebrate her daughter's Bat Mitzvah.

"We'd gone shopping for party dresses, and I was trying on some things in the fitting room," says Amy. "And that's when I saw it: a small, pea-sized lump on my breast. I made an appointment with my doctor, and since it was almost time for my annual visit, she suggested I have a diagnostic mammogram. That's when I came to the N.C. Cancer Hospital."

Amy's mammogram results were negative, but because she has dense breasts, her breast radiologist recommended an ultrasound, which led to a biopsy. Amy was diagnosed with ductal carcinoma in situ, or DCIS, the most common type of noninvasive breast cancer. After evaluating her options, Amy chose to have a lumpectomy and radiation. However, her case was sent to the radiology review board. Due to the density of her breasts, they wanted more information and asked Amy to have an MRI.

Those results showed even more DCIS in the tissue, and after another biopsy, the board strongly suggested that Amy have a mastectomy. On January 13, 2015, David Ollila, MD, surgical director of the UNC Breast Center, performed a partial mastectomy and sentinel node biopsy. Fortunately, Amy's lymph nodes were clear, but she did have a six millimeter stage I invasive breast cancer called "HER2-positive." Her oncologist, Lisa Carey, MD, the Richardson and Marilyn Jacobs Preyer Distinguished Professor in Breast Cancer Research. recommended chemotherapy for

"Years ago, this was worst, most aggressive type of cancer," explains Carey. "But then studies began to show that the anti-HER2 drug Herceptin, combined with chemotherapy, really changed the game and made it a much more treatable cancer. But questions remain about the best way to administer these treatments."

Carey explains that normally, patients are given high doses of several chemotherapy drugs with Herceptin added, followed by completion of a year of Herceptin.



However, while this treatment protocol is very effective, the side effects can be tough on the patient. "So when Amy and I talked about her treatment options, I told her about a clinical trial initiated by colleagues at Dana-Farber Cancer Institute. UNC is part of a group of academic institutions that work together on trials like this one," says Carey. "In this study, we're using a new drug called trastuzumab emtansine. known commercially as Kadcyla, which is a chemotherapy drug attached to Herceptin, so the chemotherapy only goes into the cancer instead of all over the body. The combination is called TDM1, but its nickname is the 'Trojan Horse'

because it's such a targeted form of treatment. I was pleased that Amy agreed to be a clinical trial participant."

Off and Running

Amy began taking TDM1, but still, she kept on running with her doctor's permission. Then on April 20, 2015, just six days after a chemotherapy treatment, Amy stood at the starting line of her seventh Boston Marathon while her husband Jonathan and daughters Julia, Elisabeth and Ava cheered her on. "I kept thinking, 'You can't finish if you don't start.' I just wanted to cross the finish line, not necessarily beat my own time. And before I knew it, we were off and running."

The Boston Marathon is a grueling race with a course that winds through eight Massachusetts cities and towns. One of those is Brookline, the place where Amy grew up and where her mother, who died of lung cancer, was laid to rest. "Miles 22 through 24 of the Marathon run through my hometown," explains Amy. "It was a pretty emotional moment for a number of reasons."

Amy crossed the finish line feeling exhausted, relieved, and most importantly, like a champion. "By running the Boston Marathon, I learned that, in spite of breast cancer, I am still me," she says. Meanwhile, Carey says she's happy with Amy's response to the clinical trial drug and looks forward to seeing the final results of the study. "We're finding that it's as important to tailor a patient's course of care to less treatment if possible, as it is to tailor care to more treatment if necessary," says Carey. "It's good to have options."



SKIN CELLS: CANCER-FIGHTING WARRIORS

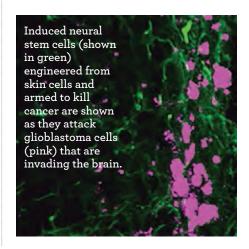
stem cell is
essentially a "blank"
cell, capable of
becoming another,
different type of cell
anywhere in the human body.
Microscopic in size, stem cells are
big news in medical and science
circles because they can be used to
replace or even heal damaged tissues
and cells in the body, a sort of builtin repair system for humans.

In a first for medical science, UNC Lineberger researchers are turning skin cells into cancer-hunting stem cells that destroy brain tumors known as glioblastoma – a discovery that can offer, for the first time in more than 30 years, a new and more effective treatment for the disease.

Glioblastoma is a fast-growing, aggressive form of brain cancer. The survival rate beyond two years for a patient with a glioblastoma is only 30 percent because it is so difficult to treat. Even if a surgeon removes most of the tumor, it's nearly impossible to get the invasive, cancerous tendrils that spread deeper into the brain, and inevitably, the remnants grow back. Most patients die within a year and a half of their diagnosis.

"Current strategy to treat the disease is surgical removal of the tumor, followed by radiation and chemotherapy in hopes of killing remaining cancer cells. All of those treatments help, but it's a very difficult disease, and patients

desperately need a better standard of care," says Matt Ewend, MD, a UNC Lineberger member, Van L. Weatherspoon, Jr. Eminent Distinguished Professor and chair of the Department of Neurosurgery at UNC.



Researchers want to improve those statistics by developing a new personalized treatment for glioblastoma that starts with a patient's own skin cells, with the goal of getting rid of the cancerous tendrils, effectively killing the glioblastoma.

Shawn Hingtgen, PhD, a UNC
Lineberger member and an assistant
professor of molecular
pharmaceutics in the UNC
Eshelman School of Pharmacy, says
his team has engineered these stem
cells so that they can actually hunt
down the cancerous tumor cells.

"This requires a conversion process called 'direct reprogramming'," explains Hingtgen. "We turn skin cells known as fibroblasts into special neural stem cells. Working with mice, our team has shown that

these so-called 'induced neural stem cells' have an innate ability to move throughout the brain and home in on any remaining cancer cells. The team also showed that these stem cells could be engineered to produce a tumor-killing protein, creating a promising new strategy for killing glioblastoma cells embedded throughout the normal brain."

In mouse studies, survival rates doubled and tripled. The hope is the new method would do the same in human patients.

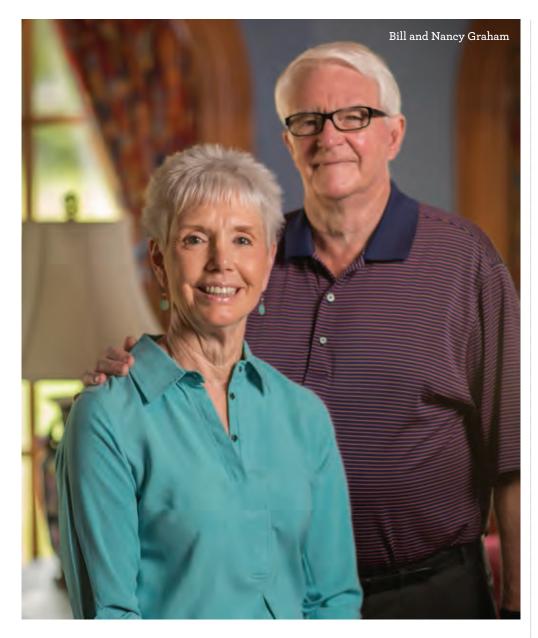
"In a test dish with pink human tumor cells, scientists can see the green stem cells hunting down the tumor cells," says Ewend. "Those cells can see things that I can't see as a surgeon. They can find cells I can't find and offer us a chance to get rid of those last few remaining cells that

cause the recurrences."

Researchers are already collecting biopsies from glioblastoma patients to test the concept on human tissue. They hope it will result in human trials and an effective therapy to add to current treatments. If ultimately successful in human trials, UNC researchers envision the concept being adapted to fight other types of brain cancer, including pediatric cases and "breast-to-brain-cancer" in women.

"Our work represents the newest evolution of the stem-cell technology that won the Nobel Prize in 2012. It's the first time this direct reprogramming technology has been used to treat cancer, and we have high hopes for success," Hingtgen says.





DONORS' MATCHING GIFT CHALLENGE RAISES MORE THAN \$250,000

ne-in-two men and one-in-three women will face cancer in their lifetimes. At UNC Lineberger, we are diligently working to change these statistics – not just for the patients who are currently battling cancer, but for all those who will be diagnosed with cancer in the future. However, we can't do it alone. Your financial support is critical to our

next-generation cancer research and exceptional patient-centered care. So it's with heart-felt thanks that we share the success of our first-ever annual matching gift opportunity, a campaign that truly shows the power of the collective good.

In March 2016, an anonymous couple made a gift to UNC Lineberger, but there was a catch – the amount would be based on the generosity of others. "This cancer center is making a significant, positive impact on the lives of North Carolinians, and it's time for people to step forward and show their support," the donors said. "Therefore, we will match every gift, dollar for dollar, up to \$50,000. We hope our friends and neighbors will rise to the challenge."

And did they ever! Within two weeks of the initial gift challenge, the cancer center received \$50,000 in matching gifts. But it didn't stop there. After hearing about the campaign's success, UNC Lineberger Board of Visitors members Bill and Nancy Graham were inspired to issue an additional \$50,000 challenge, effectively quadrupling the gift! As of this newsletter print date:

- UNC Lineberger had received 795 gifts, totaling \$253,828.
- 86 donors made their first-ever gift to the cancer center.
- Many contributors increased their fiscal year giving by making a special gift to the match.
- This matching challenge resulted in the largest number of donations to UNC Lineberger for any online fundraising effort of its kind.

"This campaign accomplished two major goals," explains Betsy Gentry-Bumm, director of annual giving. "It increased awareness about UNC Lineberger, North Carolina's only public NCI comprehensive cancer center. It also raised an extraordinary amount of money for cancer research, something we will feel the effects from for years. For these reasons, we are truly humbled by everyone who supported this matching challenge."

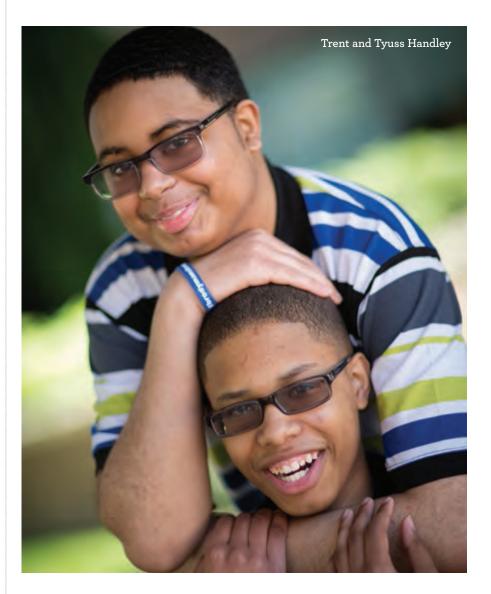
BILL AND NANCY GRAHAM

There's power in a match

Like many UNC Lineberger supporters, Bill and Nancy Graham were drawn to our cancer center for dual reasons - both familial and medical. Bill's uncle, Page Graham, was one of the original members of the UNC Lineberger Board of Visitors and was extremely proud of the cuttingedge research being done here to help his fellow North Carolinians. Page recruited Bill and Nancy to serve on the board, and through the years, the two have become avid cheerleaders for the cancer center. They have also been personally affected by cancer and have a keen understanding of UNC Lineberger from a patient's perspective.

"In 2007, I was diagnosed with breast cancer and began treatment here in Winston-Salem, but our daughter encouraged me to get a second opinion at Lineberger. I'm so glad I did," says Nancy. "When I walked in the door at UNC, I knew I was in the right place. Dr. Lisa Carey was my oncologist and provided superlative care. The late Dr. Keith Amos was my surgeon, and I adored him. I feel like I hit the jackpot with regards to my physicians. I had chemo in Chapel Hill and came back home to Baptist Hospital for my radiation. Today, I'm thankful to be cancer-free."

When asked what appealed to the couple about the 'matching' nature of this giving opportunity, Nancy says it's all about doubling the power of the gift. "Bill and I knew time was of the essence if we wanted our contribution to have the most impact, and we are so pleased that others rose to the challenge, matching the funding dollar-for-dollar," says Nancy. "Looking back at the campaign's success, we've seen the collective abilities of gifts, whether large or small, to help patients like Trent Handley have a fighting chance to beat cancer."



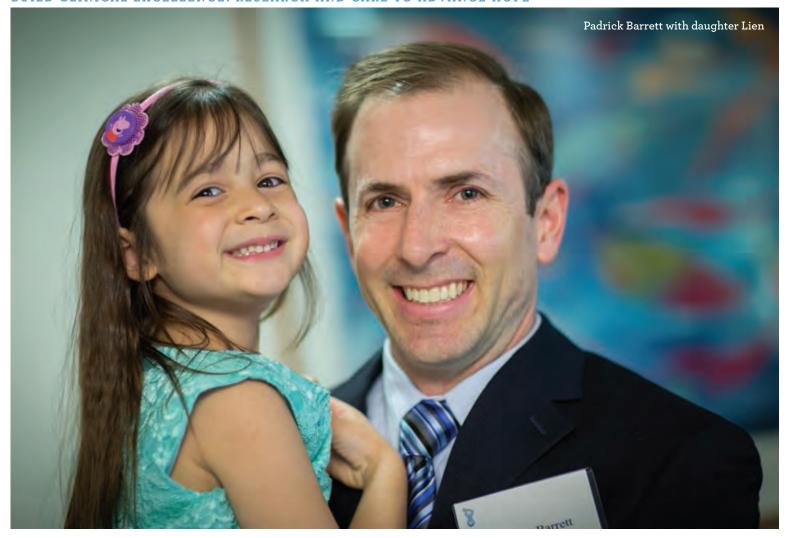
HANDLEY TWINS FEATURED IN LINEBERGER CAMPAIGN

In March of 2015, Trent Handley was diagnosed with a rare form of cancer called "natural killer cell leukemia." Worldwide, there are only about 60 known cases of this kind of cancer. Trent was admitted to the N.C. Cancer Hospital; his fraternal twin brother Tyuss was devastated.

Pediatric oncologist **Brent Weston, MD**, and a team of caregivers worked feverishly to get him the right protocol and treatment while the family spent months in the cancer hospital. And then the good news came: Trent was in remission.

"As a mom, when you watch your child going through something that's life-threatening, and then to see that miracle...there are no words to express our gratitude," says the twins' mother, Tanisha Handley.

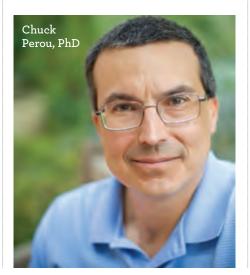
As part of the matching gift challenge, we featured Trent and Tyuss in our online campaign video. To learn more, go to www.unclineberger.org/twins.



CANCER RESEARCH: MORE THAN JUST TREATMENT AND DETECTION

nderstanding what causes cancer, who gets it, and why, is an important area of research at UNC
Lineberger. We are frequently asked, "How close are you to preventing and curing breast cancer?" The good news is, breast cancer mortality rates are declining, and according to Chuck Perou, PhD, we can expect that progress to continue.

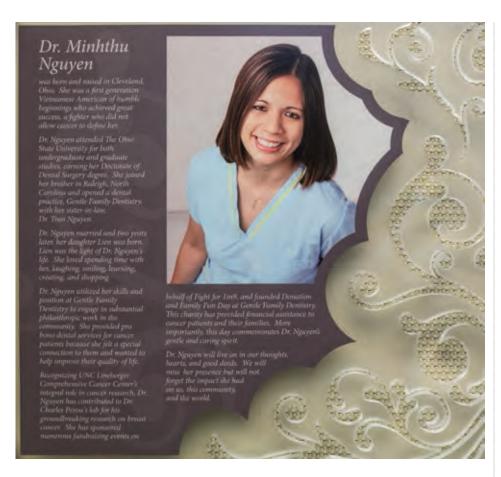
"We now know that breast cancer is not one single disease, but at least five," says the May Goldman Shaw Distinguished Professor of Molecular Oncology at UNC. "Using genomics, genetics, and laboratory models, my colleagues and I are focused on identifying the genetic mutations that cause these aggressive types of breast cancer. Based on that data, we work to develop novel therapeutic strategies that specifically target each of these distinct subtypes."



While funding for Perou's research comes from many sources, philanthropic support from local donors like the late Minhthu Nguyen and her husband Padrick Barrett make future scientific breakthroughs possible.

Minhthu Nguyen: the ultimate giver

When 34-year-old Minhthu Nguyen, DDS, was diagnosed with stage IV breast cancer, she and her husband Padrick Barrett were stunned and shaken by the news. "We were brand new parents of a baby girl, Lien, so to learn about the severity of Minhthu's illness was pretty shocking," says Padrick. "But in typical fashion, Minhthu didn't wallow in self-pity.



She told me she wanted to approach her treatment with grace and dignity, and that's what she did."

Minhthu and Padrick sought care from Mark Graham, MD, of Waverly Hematology Oncology in Cary, NC, where he told the couple it was possible that Minhthu's pregnancy had actually masked the symptoms of her disease and allowed her tumor to progress undetected, since the signs and symptoms of breast cancer can be similar to the changes in a woman's body during pregnancy. "Minhthu had advanced metastatic cancer, and I strongly encouraged them to pursue treatment at UNC Lineberger, which is guided by some of the exceptional findings from the Chuck Perou lab," savs Graham, "I told them that Chuck is North Carolina's best kept secret, a true

forerunner in the field of breast cancer research and genomics." The two took Graham's advice and worked closely with Perou and Ben Calvo, MD, both UNC Lineberger members, to fight her disease. In fact, they were so impressed with Perou's lab, his commitment to research, his humility and exceptional caregiving spirit that they have contributed more than \$100,000 to his work.

"Minhthu, an eternal optimist, wanted other patients to feel hopeful about beating cancer."

- Padrick Barrett

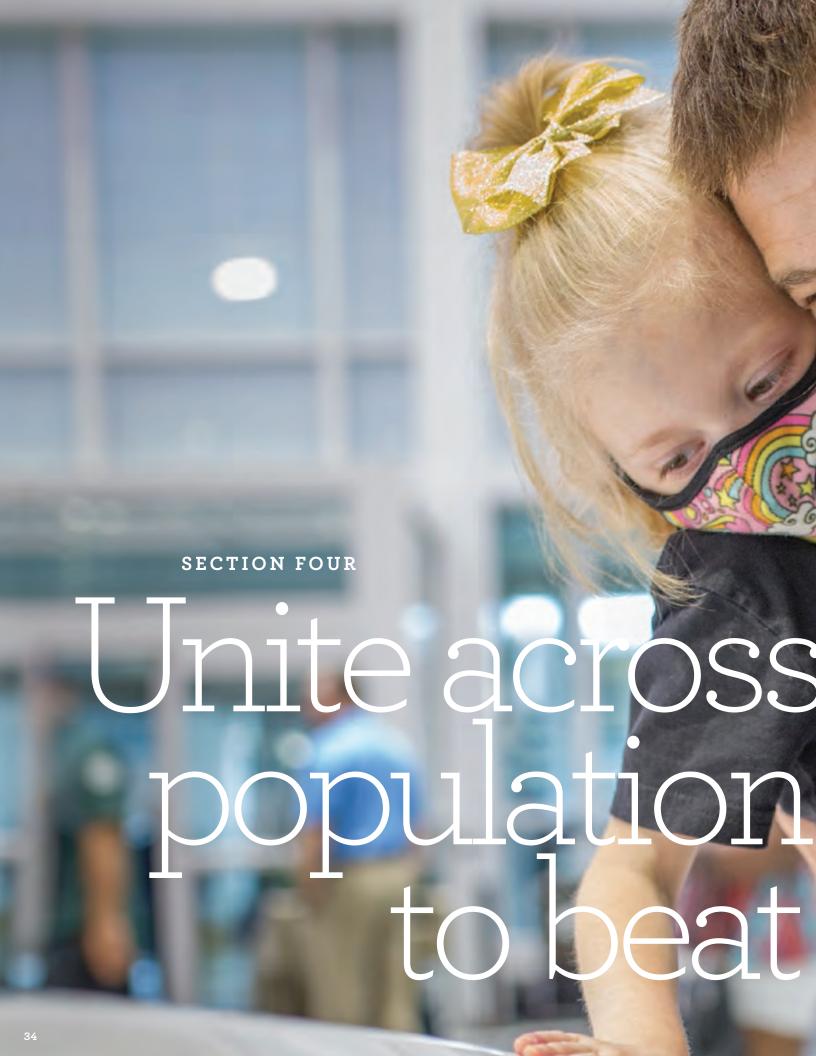
"The investment that Minhthu and Padrick have made to my work is both substantial and inspiring," says Perou. "As a researcher, every dollar helps, but more importantly, meeting individuals like Minhthu gives us an additional drive to try and make a difference in the lives of cancer patients. This gives me more focus and more meaning to my work."

Minhthu's generosity spilled over into her professional life as well. At her dental practice, Gentle Family Dentistry, she frequently performed pro bono services for other cancer patients, and there were specific days when a portion of office receipts went to charity. "Minhthu was committed to making life better for our staff and patients," says Padrick. "She was always doing special things for others. She was the ultimate giver."

The gift that keeps giving

Minhthu Nguyen passed away on September 8, 2015, following her courageous four-year battle against breast cancer. To honor Minhthu's memory, her brother, Dr. Phong Nguyen and her husband Padrick made a gift of \$250,000, choosing to name the mammography reception area in the N.C. Cancer Hospital for her. They also furnish the space with fresh flowers at all times and provide refreshments once a month for patients.

"UNC Lineberger is a wonderful leader in cancer research and care, but many people aren't aware of the amazing work they do every day," says Padrick. "Every person we've met here has been genuinely welcoming, just like Minhthu was. She didn't get to live the life she wanted, but by making this gift to UNC Lineberger, our family is doing what we can to keep her spirit alive."







BASCH TO STUDY, MEASURE HOW CANCER PATIENTS' FEEDBACK AFFECTS OUTCOMES

than Basch, MD, MSc, personifies what it means to be a clinician-scientist. In the clinic, Basch provides compassionate, expert care for people who have urologic cancers, with a focus on prostate cancer. Outside the clinic, he is a national leader in the study of patient-reported outcomes, a field of research that measures how cancer treatments affect patients' overall wellbeing.

"Patient-reported outcomes – which involves patients telling their health care provider how they're feeling, how they are functioning, or a symptom they are experiencing during treatment – provide critical insights that we clinicians typically have not sought to capture in the past," explains Basch, who is the director of UNC Lineberger's Cancer Outcomes Research Program.

"While this is still a relatively young field of study, we are quickly finding that this information has great value; it helps us to better assess the full impact of standard and experimental therapies on our patients," Basch adds.

The Patient-Centered Outcomes
Research Institute recently awarded
Basch a \$5.45 million grant to
support a national study to
investigate whether integrating
patient-reported symptoms into
cancer care management can
improve the patient's quality of care

and quality of life, as well as measure the impact of patient self-reporting on the healthcare delivery system.

"Patients with metastatic cancer frequently experience symptoms that cause distress, disability, and lead to urgent care visits," says Basch, a professor in the UNC School of Medicine Division of Hematology and Oncology. "These symptoms often go unrecognized and unaddressed by clinicians, even though there are many interventions that can provide relief."

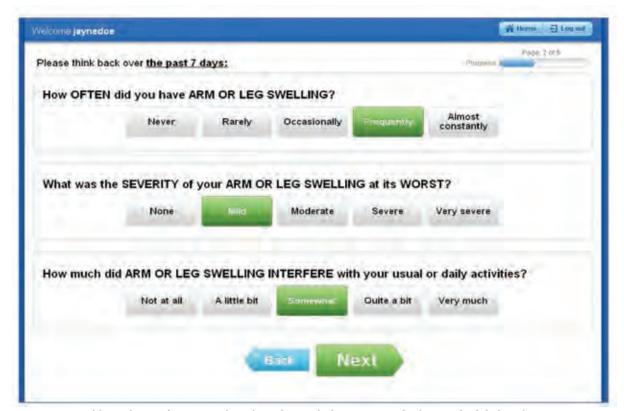
Making it easier for patients to report their own symptoms electronically at regular intervals could address this issue. Studies have found that most patients are willing and able to self-report symptoms during cancer care, and clinicians find this information valuable. This approach leads to better patient quality of life, reduces emergency room and hospital visits, and may lengthen survival.

Basch and his colleagues aim to investigate these findings on a larger scale. They have developed a randomized trial to better understand the impact of patients self-reporting symptoms. Their study will track a number of outcomes, including physical function, quality of life, survival, emergency room/hospital visits, and perspectives about relative benefits

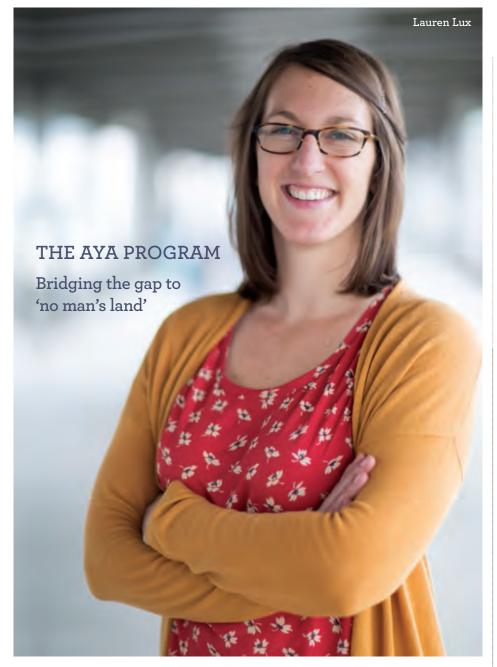
and burdens from patients, clinicians, and national organizations.

While technology has led to great advancements in cancer research and care, developing simple tools to improve patient-caregiver communications may prove to be highly beneficial as well.

"Previous studies suggest that the benefits of patient-reported outcomes will justify the personnel and financial costs associated with the program, but a randomized trial is needed to more clearly determine the impact patient-reported outcomes has on quality of care and the delivery of care," says Basch.



Patients are able to share information about how they're feeling on a regular basis, which helps physicians better assess patient quality of life. The graphic above is an example of an online reporting tool.



eing a teenager is tough. Now, imagine being a teenager and having to deal with a cancer diagnosis.

Adolescent and young adult (AYA) cancer patients are not only in a stage of life where they're discovering who they are, gaining independence from their parents and preparing for adulthood; they're also having to deal with the pain, stress and confusion that accompanies a life-changing diagnosis.

Around the world, there is a growing appreciation of the unique needs of teenagers and voung adults who have cancer. Unfortunately, there are still huge gaps in terms of their personalized psychosocial care. UNC Lineberger has teamed up with the Be Loud! Sophie Foundation to change that. The Be Loud! Sophie Foundation is a local organization established in memory of Sophie Steiner. Diagnosed with germ-cell cancer at age 14, Sophie spent months undergoing treatment at UNC Lineberger. An energetic, sharp young woman, it did not take

long for Sophie to recognize that, while she was receiving the best care available, there was nothing specifically designed for people her age. This absence of resources in tailored care for adolescent and young adult patients — those ages 13 to 26 — is something the National Cancer Institute has referred to as a "no man's land."

THE ADVOCATE Lauren Lux

In 2015, UNC Lineberger created a unique role at the N.C. Cancer Hospital to bridge this gap, a position dedicated to designing support programs and providing resources to this demographic. The Adolescent and Young Adult program began, and Lauren Lux, a licensed clinical social worker who understands the unique needs of this specific patient population, was hired as director.

Lux says Sophie Steiner's experience of not quite fitting in is typical among many AYA patients in the United States. "It's a tough group because they're not kids, and they're not adults," she says. "They don't necessarily feel at home in a pediatric world, and they don't really feel at home in an adult world. My main objective is to help this patient population maintain their identity and their dignity." With a focus on personhood and humanness, Lux has begun to design programs that support these patients in a way that reminds them of what they love about life. "One of the goals we have is that cancer will become a part of the patient's narrative," says Lux. "But it won't become all of it."

THE DONORS The Steiner Family

Two years after Sophie's death, her parents, Lucy and Niklaus Steiner, and her sisters Elsa and Annabel have fulfilled the first major goal of the Be

Loud, Sophie! Foundation they started in her honor: working with UNC Hospitals and UNC Lineberger to hire an AYA program director. But they are far from finished. Together with UNC, they now have the chance to support a research-based program that advances the national understanding of how best to meet the unique needs of patients within the AYA demographic.



"When we started our foundation, we based our goalsetting on our own personal experiences with Sophie," explains Niklaus. "But we also realized that our perspective was limited, because every child is different and needs different things. However, there is one common thread among this special patient population: they all want institutional understanding and support of who they are as individuals. These kids know who they were before cancer, and they want to continue being themselves. That's what Sophie wanted."

Cancer is a unique diagnosis because a cancer patient's health can quickly change from one hour to the next. That's especially hard on a young person who is seeking steadiness as they are going through the maturing process towards adulthood. "It can be a blow to one's sense of self, but we believe that UNC's AYA Program will help lessen those feelings by enabling these teens and young adults to experience the milestones every young person goes through," says Lucy. "And ideally, once they are in remission, they can say, 'I will face the rest of my life with positive energy, because if I can get through

cancer, I can face anything. I will not live in fear, but with strength."

The Steiners are extremely pleased that Lux is leading the AYA efforts, saying she has a personality that is attractive to teens and serves as an advocate for them. "We've encouraged Lauren to identify program needs as they evolve, and just since October 2015, she's accomplished a great deal," Niklaus says. "She's setting research goals, developing assessment tools to evaluate the program's effectiveness, and providing internal support to clinicians as they learn more about caring for this age demographic. She's terrific, and it's a pleasure working with her."

THE PATIENT Melody Kessler, 23 Hodgkin's lymphoma

Melody Kessler slowly turns her wedding band on her left hand as she sits in an infusion chair at the N.C. Cancer Hospital. Her husband, Calvin Deutschbein, hands her a water bottle and

encourages her to keep drinking. "You need to stay hydrated," he says. The two are waiting for Melody's regularly-scheduled chemotherapy treatment.

Melody and Calvin met in middle school in their hometown of Loveland, Colorado, where they became fast friends as members of the MathCounts team. Their friendship bloomed into romance, and they dated throughout high school and college. The couple became engaged, but their excitement was short-lived. On December 30, 2014, Melody was diagnosed with Hodgkin's lymphoma.



"I had a lump in my neck behind my clavical and experienced a continual rash and itchiness for about a year, but I didn't think it was cancer," says Melody. "It was a shock, to say the least."

Melody was treated at University of Colorado Health, where she underwent six months of ABVD, the first line chemotherapy for Hodgkin's lymphoma. On average, ABVD cures approximately 80 percent of patients who receive it. Melody's treatment was successful, and after going into remission, she and Calvin married on August 8, 2015. They moved to Chapel Hill to attend graduate school in August 2015.

Melody had been in remission about four months when she had a PET scan at UNC in October 2015. "My doctor, **Steven Park, MD**, said the results didn't look good," Melody explains. "He did a biopsy, which came back negative, so he decided to do another PET scan in January of this year. The cancer had come back."

Another round of treatments began in March, this time, a form of chemotherapy called ICE that lasted 12 weeks. Her scans showed improvement, but she wasn't in remission yet. "There was still some disease that was chemo-resistant," says Melody. "So Dr. Park started me on another treatment called GVD, which is used to treat patients who have relapsed after remission from Hodgkin's disease. I'm thrilled to say that after that chemo, I am now cancer-free! I will have a stem cell transplant this fall."

"When I met Lauren, she asked me about my experiences as an AYA patient, and I told her it's tough being this age and having cancer. I want to be respected and heard, because my voice matters. I may be young, but I've done more thinking about my mortality than most 60-year-olds. I really appreciate that UNC has a person like Lauren who's dedicated to helping me through my cancer journey at this particular stage of my life. I know she's in my corner."

THE PATIENT

Ethan Johnson, 16
Philadelphia
Chromosome-Positive
Acute Lymphoblastic
Leukemia

To look at Ethan Johnson, you'd never know he's been fighting a two-year battle with cancer. His blond, curly hair has grown back, and his pale skin now has a healthy glow, thanks to a bit of summer sun. His appetite

has returned, so he's been eating lots of pasta lately. "Spaghetti's my favorite," he laughs. "I never get tired of it." He looks like an ordinary teenager.

But the last two years have been anything but ordinary for the Johnson family. What started as an annual physical at his pediatrician's office turned into a nightmare on October 19, 2014, when Ethan was diagnosed with Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia (Ph+ ALL).

"We were blindsided, because Ethan hadn't been sick, and he had no symptoms. But multiple blood tests showed his counts were really high," says his mother, Sharon. "We came to UNC that Sunday, and Ethan immediately began chemotherapy treatments that same evening. My husband Rick and I asked lots of questions because we didn't know anything about Ethan's disease."

Pediatric oncologist Patrick Thompson, MD, explained that Ph+ ALL is a rare chromosomal form of leukemia, and that Ethan and his family were at the beginning of a long, hard journey. And Thompson was right. Ethan soon lost his hair, and he was frequently nauseous or sick due to the many medications he took. Since he was unable to attend school, he missed being with his friends, and he was concerned about falling behind in his academics.



"My parents arranged to have a homebound teacher work with me three hours a week," Ethan explains. "But otherwise, my mom has become my teacher, classmate, principal, and school bully! Fortunately, I've been able to keep up with my classmates and have made the honor roll each quarter. I was invited to join the National Honor Society last semester, so I'm pretty proud of that. My favorite subject is medical science, and I think I'd like to pursue a career in the medical field."

Even though he's performed well in school, Ethan has missed doing all the typical things teenagers do, like skateboarding, going to the movies, and attending school activities. But his stay in the N.C. Cancer Hospital has produced some unexpected surprises.

"Dr. Thompson and I have a great relationship," says Ethan. "I'm comfortable asking him anything, and I trust he will always tell me the truth. All of the doctors and nurses have been super nice. I've been lucky to find a great friend who is also a patient and has the same diagnosis I do. His friendship has really helped because we feel exactly the same about this whole experience. Our moms get us together as much as possible, and we Skype to play video games together and text a lot."

Although Ethan's road to recovery isn't over, the Johnson family continues to move forward and has become closer as a result of his illness. "I have a lot of nervousness about the unknown, and at times, I've been scared I was going to die," Ethan says quietly. "But my parents have really helped me through those worries. They tell me they chose my name – Ethan Asher – because it means 'strong and happy,' so I try to be. I have faith that God will take care of me and help me through this part of my journey."

THE PATIENT

Damonte Stackhouse, 19 Acute Lymphoblastic Leukemia (ALL) There's the saying that, "plans are made to be broken." But according to Damonte Stackhouse, his plans haven't been broken by cancer; they've just been put on hold.

In November 2015,

Damonte wasn't feeling well and went to his local emergency room in Fayetteville, N.C. After extensive testing, he was transferred to the N.C. Cancer Hospital, where he was diagnosed with Acute Lymphoblastic Leukemia (ALL).

"I felt this wave of emotions: shock, hurt, worry, anger. I just couldn't believe it," Damonte says. "I didn't know anything about the disease; in fact, I didn't even think cancer was real. When they told me I have ALL, I was afraid I was going to die."

Damonte's oncologist, **Katarzyna Jamieson, MD**, has been with him every step of the way, through multiple rounds of inpatient chemotherapy, as well as a recent

bone marrow transplant. "She told me the treatments would make me very sick, but until you actually go through it, you just don't realize how difficult it will be," he explains. "My hair fell out, I lost weight, I had no energy... it was really awful."



The effects of cancer have been more than just physical for Damonte. He says feelings of isolation – of being away from family, friends and home – were beginning to overwhelm him. That is, until Lauren Lux stepped in.

"Lauren listened to me, and she understood my frustration about having to stay in the hospital for such a long time, disconnected from my life and the people I love," says Damonte. "She's been a great sounding board when I've needed a friend. Plus, she's done some really nice things for me, like surprising me with my favorite meal for dinner, taking walks with me, even providing gas cards through the Be Loud, Sophie! Foundation so my girlfriend, De'Sha, could come visit me while I'm in the hospital. Her kindness has been very encouraging."

Damonte's home-away-from-home for the next few months will be the SECU Family House, and if all goes according to plan, he'll be home for the holidays. While he has struggled with the loss of his independence during his illness, he says the time he's spent at the N.C. Cancer Hospital has given him a new perspective on life. Prior to his illness, he had been at a crossroads, not sure whether he wanted to attend college or to enlist in the U.S. Navy. But during the quiet moments in his hospital room, Damonte decided it's time to get serious about his future.

"I want to continue my schooling and enroll in community college so I'll have career options. Cancer has definitely caused me to re-evaluate my life, and I don't want to waste any more time."



FACULTY PROFILE: DRS. MARKS AND HERTZ PAY IT FORWARD

he old saying that, "great minds think alike" is particularly true in the case of Larry Marks, MD, and Caryn Hertz, MD. The two met as students at The Albert Nerken School of Engineering at The Cooper Union for the Advancement of Science and Art in Manhattan. "We were both chemical engineers, and after finishing at Cooper Union, we mutually decided to attend medical school," says Hertz, an associate professor of anesthesiology at UNC. "We were fortunate to have that opportunity."

"Fortunate" is a word Hertz and Marks use frequently when referring to their lives as a family and as physicians. "We've got three healthy sons, careers we love, and a wonderful network of friends and loved ones here in Chapel Hill," explains Marks, a UNC Lineberger member and chair of Radiation Oncology at the UNC School of Medicine. "We have been blessed, and we feel a responsibility to give back in gratitude."

Hertz and Marks are extremely active in a variety of non-profits and charities, serving on various boards and offering financial support to their alma maters, public radio, the MS Society, and their local synagogue, just to name a few. "We both grew up in New York, back when there was a sense of community and people helped each other," Hertz says. "We've tried to pass that mentality on to our boys, to

show them the power of volunteerism and philanthropy and to practice what we preach."

Not long after joining the radiation oncology faculty at UNC, Marks was invited to a UNC Lineberger fundraiser, where he was introduced to many of the donors who support our cancer center research. "They are a very committed group, and it only made sense that Caryn and I would join them in giving to the institution that employs us, provides state-ofthe-art cancer care, and treats all patients, regardless of their ability to pay. You know, Caryn and I are very lucky to do what we do, and after working with cancer patients all day, I'm humbled and grateful at the same time. We're just happy to be able to help."

LAB NAMING HONORS SHE ROCKS FOUNDER

hen cancer strikes, patients often tell us they have a choice to make: they can become bitter, or they can become better. Thankfully, Beth Quinn chose the latter.

A banker, mother, grandmother, community volunteer and friend, Quinn had always been physically fit and proactive with her health. But over a period of months, she began having abdominal pain and bloating, going to various doctors to determine the cause. On December 23, 2013, Beth went into surgery to have her gall bladder removed, and woke up to the news that she had stage IV ovarian cancer.

"We will continue to fight cancer through our support of Dr. Bae-Jump's work. We have to find a cure for this disease."

- Beth Ouinn

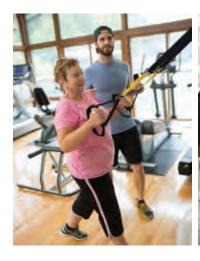
Because there are no screenings for ovarian cancer, and women are typically asymptomatic until the disease has advanced, Beth was



unaware of her illness. Her best friend, Mary Barto, agreed that this was unacceptable, and the two of them partnered with another close friend, Tracy Brown, to do something about it. They formed She ROCKS, a Wilmington-based organization dedicated to raising funds for ovarian cancer research and providing local support to patients affected by all cancers.

Funds raised by She ROCKS go directly to UNC Lineberger to fund the ovarian cancer research of UNC Lineberger member Vicki Bae-Jump, MD, PhD, as well as to patient support programs at Quinn's community hospital, Zimmer Cancer Center. To date, the group has contributed more the \$170,000 to Bae-Jump's work.

In recognition of Quinn's investment in research and her confidence in the ongoing mission of UNC Lineberger, Paola Gehrig, MD, professor and director of UNC Gynecologic Oncology, joined Bae-Jump in making a surprise announcement on September 7 during the 3rd Annual She ROCKS Fundraiser in Wilmington, NC. "UNC Lineberger is pleased to name one of the Bae-Jump lab spaces in our cancer center building in Beth's honor," Gehrig and Bae-Jump shared with more than 700 attendees at the Wilmington Convention Center. "As Beth continues to fight ovarian cancer, The Beth Ouinn Lab will be a constant reminder of the importance of our work and a meaningful tribute to a brave cancer center advocate and friend."









2015-2016 UNC LINEBERGER MAJOR GIFTS AND PLEDGES

Major gifts are critical to UNC Lineberger's ability to recruit and retain the very best minds in the cancer field, invest in high potential research, provide innovative patient care and support programs, and ultimately find cures. Our deepest appreciation is extended to the following donors who have made generous commitments this year.

\$1,000,000+

Dr. and Mrs. Kenneth A. Williams to establish the Ken and Cheryl Williams Fund for Venture Inititatives, a commimtment to support unrestricted research at the discretion of the Director of UNC Lineberger. In recognition of this historic commitment, the N.C. Cancer Hospital Lobby was named in memory of the Williams' son, Tony.

\$100,000 - \$999,999

Mr. Padrick Barrett and Dr. Phong Nguyen to name mammography waiting room in memory of Dr. Minhthu Nguyen.

Howard Hughes Medical Institute to support the research of Dr. James Bear.

Mr. and Mrs. George W. Loewenbaum to support the research of Dr. Charles Perou.

She ROCKS, Inc. to support the ovarian cancer research of Dr. Vickie Bae-Jump.

Triad Foundation to support a cancer screening initiative in Mecklenburg County.

The V Foundation to honor founding board member, Nick Valvano, in support of the research of Dr. Charles Perou.

Vs. Cancer Foundation to support pediatric immunotherapy clinical trials and to provide supportive care services for pediatric patients and families.

\$50,000 - \$99,999

An **Anonymous** Donor to support priority areas where the need is greatest through the matching gift challenge.

Atlantic Corporation of Wilmington, Inc. to sponsor the 11th Annual Fast Break Against Cancer in honor of Coach Roy Williams and to support breast cancer research.

Estate of Mr. Lovick P. Corn to support the pediatric oncology research of Dr. Barbara Savoldo.

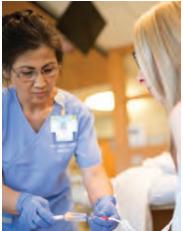
Estate of **Gilda J. Cree** to support leading-edge cancer research.

The Blue Ribbon Run to support scientific research to help better understand, diagnose, treat and cure colon cancer given in memory of Julie M. Brown and Christina M. Gianoplus.

Boddie-Noell to support cancer research, treatment and outreach programs through the Blue Ribbon Gala.









Mr. and Mrs. Earl Chesson to support the Gail Whisenant Towne Enowment Seed Grant Fund for Cancer Research.

Mr. and Mrs. William E. Graham III to support priority areas where the need is greatest through the matching gift challenge.

The Holly Project

Dr. Jennifer Hunter-Yates and Mr. Philip G. Yates to support colon cancer research.

\$25,000 - \$49,999

Mr. and Mrs. Robert E. Barnhill, Jr. to support the Barnhill Seed Grant Fund for Cancer Research.

Mr. and Mrs. B. Mayo Boddie to support "The Holly Project" benefiting pediatric cancer patients and families at the N.C. Cancer Hospital.

Mr. and Mrs. Stephen A. Capps to support the Stephen Allen Capps and Jan Rowe Capps Fund for Cancer Patient and Family Support. Estate of **Ms. Margaret V. Fisher** to support pediatric oncology research.

Carlson Family Foundation to support the cancer research projects of Dr. Peter Voorhees and Dr. Tom Shea.

Constellation Brands to support Corona Cares benefitting patient and family supportive care services at the N.C. Cancer Hospital.

Dr. Krista K. Ingle and Mr. Richard L. Ingle to establish the Robert Lee Ingle Colorectal Cancer Initiatives Fund.

McMichael Family Foundation on behalf of Mr. and Mrs. Andrew M. Miracle to support priority cancer research and care programs where the needs are the greatest in honor of Mr. and Mrs. William E. Graham III.

Mr. R. Owen Mitchell* to support the 11th Annual Fast Break Against Cancer in honor of Coach Roy Williams. Oak Foundation to assess and improve the psychological, social and emotional support provided to pediatric bone marrow transplant patients.

Dr. and Mrs. William A. Sollecito to support pediatric oncology clinical trials.

Dr. Michael A. Stegman to support the Nancy W. Stegman Fund for New Ideas in Cancer Research.

Wells Fargo to support cancer research, treatment and outreach programs through the Blue Ribbon Gala.

Mr. and Mrs. J. Cross Williams, Jr. to support priority areas in cancer research and care where the need is greatest.

Mr. and Mrs. John D. Woerner to fund the Betty and Otto Woerner Endowment Fund for Patient and Family Support.

^{*} deceased

Memorial Tributes made in memory of...

We are grateful to the many families who, having lost a loved one listed below, suggested that family and friends honor the deceased by making contributions to support cancer research and care at UNC Lineberger.

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MICHAEL STEPHEN O'MALLEY MEMORIAL TRIBUTE AND AWARD

NC Lineberger lost a

dear friend and

colleague, Michael
O'Malley, PhD, on
June 24, 2015.
Michael served as the associate
director of UNC Lineberger
Comprehensive Cancer Center and
committed over 30 years of service
to the state of North Carolina. An
exceptional leader, many knew him
as a great "connector," and he was
beloved by everyone he connected
with at UNC. Hundreds attended a
memorial service to honor this wellknown teacher and mentor.

In Michael's memory, the Michael
Stephen O'Malley Cancer Prevention
Award was created at UNC
Lineberger. A fitting tribute to
Michael, this annual award
competition will ensure that
Michael's legacy and passionate life's
work continues for years to come by

recognizing excellent student work focused specifically on cancer and population sciences.

"I am deeply moved by the many gifts that have made this fund possible, and so many continue to honor Michael through their philanthropy. His kindness, wit, and humor are truly missed not only by me but countless others associated with UNC Lineberger and beyond," says Nadine O'Malley, Michael's beloved wife. "This annual award and so many other daily reminders of Michael help to celebrate his remarkable life."

For more information about how to make a memorial gift, visit www.unclineberger.org/michael or mail a check to UNC Lineberger Comprehensive Cancer Center, CB #7295, Chapel Hill, NC 27599. Please make checks payable to UNC Lineberger.



CLARK FAMILY PHILANTHROPIC ROOTS RUN DEEP

ook in the dictionary for the definition of the word 'North Carolinian' and you might see a photo of my parents, William 'Dubba' Grimes Clark III and Gray Proctor Clark," laughs Gray Clark Stoughton. "Dubba grew up in Tarboro, attended Georgia Military Academy, and then became a trueblue Tar Heel as an undergraduate at UNC-Chapel Hill. That's where he met my mother, and they fell in love."

The couple married after graduation and moved back to Tarboro, where Dubba joined the family farming business, Clark Industries. They were active citizens and taught daughter Gray and son Bill the importance of being involved in their community. "Our parents were wonderful philanthropic role models," Stoughton says. "My mother started Tarboro Community Outreach, an organization that helps underprivileged families in Edgecombe County, and she served as the first female Senior Warden at Calvary Episcopal Church in Tarboro. Mom loved helping others."

"Our parents were married 52 years and did everything together; they were soulmates and best friends," says Stoughton. "We celebrated their 50th wedding anniversary on an African safari."



Stoughton's father was equally determined to make his home state a better place for everyone. He was involved in politics at the local and state levels and led UNC's educational foundation during the time that the Dean E. Smith Center was being built. "Dubba contributed in so many ways, and always quietly, without fanfare," explains Stoughton. "In fact, he played a big part in funding the startup of the SECU Family House. It was a cause near and dear to his heart."

Dubba and Gray joined the UNC Lineberger Board of Visitors, and in 1996, they started the William G. Clark III Fund to help families with transportation and lodging costs associated with cancer treatment at UNC. After his passing in 2008, four of Dubba's friends jointly gave \$350,000 and raised another \$475,000, naming the education room of the Patient & Family Resource Center in the N.C. Cancer Hospital in his memory. Meanwhile,

Gray made frequent tribute gifts to UNC Lineberger in memory of friends and loved ones but never told anyone. "She was very humble, and she didn't want the recognition," Stoughton says.

A few years ago, Gray's health began to decline, and in June 2016, she was diagnosed with stage IV pancreatic cancer. She passed just days later at the age of 81. Stoughton and her brother have chosen to carry on their parents' legacy by serving on UNC boards – Stoughton at Lineberger, Bill at the University – and making gifts to their father's fund every year.

"Bill and I know what UNC
Lineberger means to our family,
especially after experiencing cancer
from a patient and family
perspective," says Stoughton. "It's
made us think about the research
and the work that is taking place
here, and it's made us have a new
appreciation for the cancer center. I
know our support of Lineberger
would make our parents proud."

HONOR ROLL LIST OF DONORS

Each dollar given to UNC Lineberger is meaningful, and we are deeply thankful for the 7,066 donors who contributed \$16,191,897 to our cancer center in the past year. Private support enables us to significantly increase the pace of discovery and pioneer new approaches to care, bringing us closer to our ultimate goal of making all types of cancer curable. Your generous contributions are making a difference every day in laboratories, clinics, hospital rooms and communities throughout our state. Thank you for sharing our commitment to fighting cancer.

The lists in this honor roll record the names of those Lineberger Leadership Partners who have led with gifts and pledges of \$1,000 or more to UNC Lineberger this fiscal year (July 1, 2015-June 30, 2016). To view this list online, please visit www.unclineberger.org/honorroll.

We have noted those generous supporters who have contributed as Lineberger Leadership Partners for at least 10 Years. We are especially grateful for their loyalty to UNC Lineberger and dedication to helping end cancer.

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In 2003, the Medical Foundation of North Carolina, Inc. created the Berryhill Society to recognize those individuals who have provided for the School of Medicine through a planned gift from their estates. This recognition society is named for the late W. Reece Berryhill, longtime dean and leader at the School of Medicine.

At UNC Lineberger, planned gifts can leave a legacy in your name or honor someone important to you. We honor and recognize the following supporters who have generously included UNC Lineberger in their estate plans. We extend a special welcome to our newest members, whose names are italicized.

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11TH ANNUAL ROY WILLIAMS' FAST BREAK AGAINST CANCER

righam Young
University's men's
basketball coach and
pancreatic cancer
survivor Dave Rose
spoke at the 11th annual Fast Break
Against Cancer. Hosted annually by
UNC men's basketball coach Roy
Williams, the live auction breakfast
event reached a major milestone in
2015, having raised more than \$2
million over the last 11 years to
benefit cancer research and
treatment at UNC Lineberger.



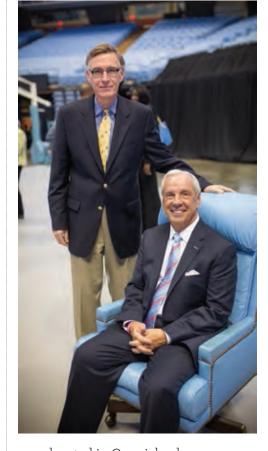
During the breakfast, Coach Rose shared that his world was turned upside down when he was diagnosed with pancreatic cancer six years ago. His plans to coach his team, run a basketball camp and go on recruiting trips were put on hold by his doctors; extensive surgeries and treatments followed.

"It was a difficult time, but I learned two very important things during my cancer journey," Rose said.
"Specifically, that I needed to become a kinder person, and that I had to find ways to enjoy the remaining time I have." That same year, Rose and his wife began pursuing other interests in addition to sports, like visiting art museums, traveling to exotic locations and simply spending quality family time together. "Cancer was a catalyst for some big, very

Following the close of Rose's remarks and the completion of the silent auction, Coach Williams and Tar Heel broadcaster Jones Angell kicked off the live auction. Auction items included an opportunity to watch a home men's basketball game from the team bench, a sleepover in the Smith Center, a cookout with Coach Williams and his team, and more.

positive life changes," he explained.

This year's auction also included the most unique item in the history of Fast Break: a Carolina blue office chair that was used by Dean Smith when the Tar Heel basketball offices



were located in Carmichael
Auditorium. The eventual winning
bidder at \$15,000 was Dr. Mark
Graham, a former oncologist at UNC
Lineberger who is now in private
practice at Waverly Hematology and
Oncology. Graham also treated
former NC State women's head
coach Kay Yow, and he told the
crowd he plans to keep the chair in
his treatment room for those
receiving chemotherapy, as a tribute
both to Smith and to Yow's grace in
her own battle with cancer.

At the conclusion of the event, Coach Williams thanked attendees for making it possible to surpass his \$2 million fundraising goal, which directly benefits UNC Lineberger. A special thanks also goes to presenting sponsor Atlantic Packaging and to all of the generous sponsors for supporting Fast Break.









Middle: Eric Strand, his wife Shiara Ortiz-Pujols, and Gwen and Gary Burrell. Right: E.T. and Champ Mitchell

29TH ANNUAL LINEBERGER BRUNCH AND BASKETBALL GAME

early 300 UNC
Lineberger
Comprehensive
Cancer Center
supporters gathered
at The George Watts Hill Alumni
Center to hear cancer survivor,
former Green Beret medic and thirdyear UNC medical student Eric
Strand speak on February 20, 2016,
during the 29th Annual Lineberger
Club Brunch and Basketball Game.

Strand shared with his audience what he calls a journey of second chances. The Alabama native dropped out of high school following his sophomore year and began working odd jobs, yet still searching for a meaningful career. He eventually got his GED and enlisted in the U.S. Army, finding that military life agreed with him. After becoming a Green Beret in the Special Forces, Strand was selected to serve as a medic.

"From 2004 to 2009, I was in a constant cycle of deployment in Iraq, which included three tours of duty in various parts of the country," he explains. "When my overseas responsibilities ended, I landed at Fort Bragg, where I became the point of contact for the UNC Advanced Medic Instructor Training (AMIT) program." From there, he finished his undergraduate degree, and the path to medical school quickly progressed. "I found the UNC School of Medicine welcoming, even though my age, background and set of experiences differ so much from other students," Strand says. "UNC has a good heart."

Speaking of heart, UNC surgery resident Shiara Ortiz-Pujols stole Strand's heart while she was training to become a burn surgeon at the Jaycee Burn Center. However, just two weeks after the couple was engaged, and only months before Strand was to begin medical school, he was diagnosed with lymphoma. "We were stunned by the news, but we decided to move quickly and get married because we wanted to have children," he says.

Strand spent a year in surgery and treatment, juggling his illness with his medical school studies. On the morning he received his final radiation treatment two years ago, he returned to the hospital later that same day to support Shiara during the birth of their daughter, Adelisa. Strand says her arrival marked the end of his treatment and a new beginning for the couple.

Today Strand is free of cancer, and looking back, he believes his life experiences have contributed to his success as a medical student and as a future health care provider. "I believe in second chances," says Strand. "Life is definitely worth living."

Each year, UNC Lineberger hosts the Lineberger Club Brunch and Basketball Game, inviting its most loyal and generous supporters. We are grateful to Lee-Moore Capital Company, Hardee's, Dual Comfort Heating and Air Conditioning, and UNC Shared Services Center Pharmacy for making the 29th annual event possible.

When she's not busy coaching the Tar Heels Women's Basketball Team or writing best-selling books, Coach Sylvia Hatchell is a strong advocate for UNC Lineberger. Every summer Coach Hatchell opens her Black Mountain blueberry patch to the public and encourages donations to UNC Lineberger in exchange for fresh blueberries.







Now in its sixth year, Corona Cares continues to raise the bar thorough their support of the UNC Lineberger Comprehensive Cancer Support Program. During the month of August, North Carolina Wholesalers and Corona's parent company, Constellation Brands, raised \$200,000 for patient and family supportive care at the N.C. Cancer Hospital. This brings the six year total to \$850,000!

Left: The women of UNC Zeta Tau Alpha sorority are long-time supporters of UNC Lineberger. Through the annual Franklin 5k and other fundraising efforts, the ZTAs have contributed more than \$200,000 to UNC Lineberger in their 20 year history!



Everyone knows that the Chapel Hill Fire Department fights fires, but did you know they fight cancer, too? In addition to arranging for the national Pink Heals tour to stop at the N.C. Cancer Hospital, they generously support our patients and their caregivers through donations to the Patient and Family Resource Center. Thank you CHFD!

In December, 300 carolers came out in support of the 10th Annual Caroling for a Cause in Cary. Led by high school senior Ryan Myer, with support from Debbie Hodgson, the group raised \$7,000 for research at UNC Lineberger. Now, that's something to sing about!



December marked the 7th Annual Bobby F. Garrett Cancer Benefit, a concert organized by Dr. Alice Garrett in memory of her husband, Bobby. Since Bobby passed away of a rare head and neck cancer in 2008, Alice and her daughter, Chaunte, have hosted this concert at the St. Matthew AME Church in Raleigh to support UNC Lineberger.



Whether it's the delicious North Carolina barbeque, live bluegrass music or the spectacular silent auction, guests just can't get enough of The Farm Party. This special event, hosted by the Teer Family Farm in Chapel Hill, has now raised more than \$15,000 for UNC Lineberger in its three-year history.



BLUE RIBBON PARTNERS

Members of the Blue Ribbon Partners giving society are volunteers and organizations throughout the community who host annual fundraising events to benefit the cancer center. To qualify as a Blue Ribbon Partner, members host events benefiting the cancer center for at least three years, raising \$25,000 or more during this period.

Bobby F. Garrett Cancer Benefit Concert Bookmark My Words

bookillark My Words

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Cocktails for Cancer

Coldwell Banker: Howard Perry and Walston

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Triad Golfers Against Cancer

UNC Carolina Baseball

Vs. Cancer Foundation

ZTA Foundation

^{*} New member

Below left: In November 2015, more than 70 members and coaches from UNC Men's Lacrosse and Baseball teamed up in the fight against pediatric cancer. Together, they raised \$32,000 through Vs. Cancer Foundation for pediatric cancer research and patient support at UNC Linebeger. These student athletes are stars on and off the field!



Above right: The UNC Rowing team selected UNC Lineberger as the beneficiary for their fifth annual Erg-A-Thon fundraiser supporting breast cancer research. The athletes set up special rowing equipment in the Pit and raised \$7,610. This year, the team was joined by a few celebrity rowers, including men's basketball player Joel James and UNC Student Body President Houston Summers.



Above left: Hosted in October at the UNC Wellness Center in Cary, the 6th Annual Pedal for Peds raised more than \$30,000! Spearheaded by UNC Lineberger's Julie Blatt, MD, and her team of volunteers, this event supports pediatric fellowships and other needs at the N.C. Cancer Hospital.

Above right: In March, the UNC Women's Softball team hosted their annual Ovarian Cancer Awareness Day, honoring former Tar Heel player Jamie Shaver Mayberry. Sadly, Jaime lost her courageous battle against ovarian cancer in May.



For the third year running, Sports Endeavors supported UNC Lineberger through sales of pink items during the month of October on their famed Soccer.com and Lacrosse.com sites. Together, the sites raised \$14,000 for cancer research. Sports Endeavors also partners with the N.C. Cancer Hospital throughout the year to provide private, behind-the-scenes tours of their Hillsborough headquarters.

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