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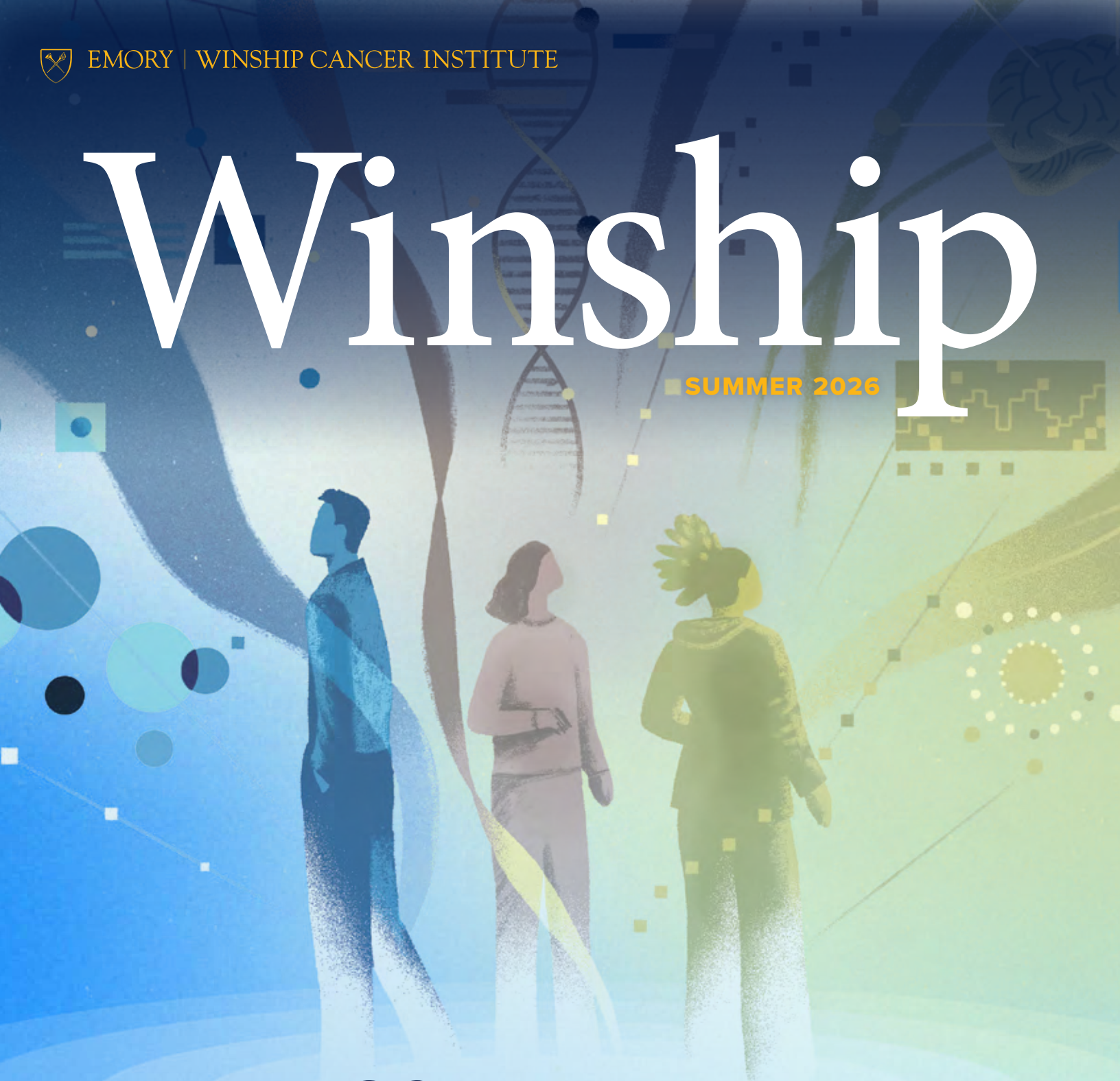
SUMMER 2026



PERSONALIZED CANCER MEDICINE BECOMES REALITY

Winship magazine

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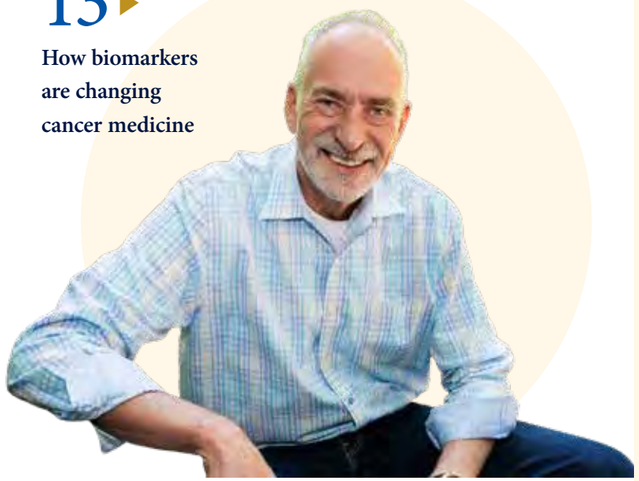

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CHECK OUT OUR **ONLINE VERSION**

◀ ON THE COVER: Developing, discovering and tailoring new ways to prevent, screen, diagnose, treat and survive cancer.

ILLUSTRATION BY MATT CHINWORTH

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FROM THE EXECUTIVE DIRECTOR

Welcome to the Summer 2026 issue of Winship Magazine.

In this issue, we are especially excited to explore how personalized medicine — also known as precision medicine — is transforming the way cancer is prevented, detected, diagnosed, treated and ultimately survived. We open with four Trailblazers sharing the research that excites them most — and, importantly, how these discoveries are poised to improve the lives of people living with cancer.

Next, we offer a Pioneering Perspective from Tari A. King, chief surgical officer for Winship and Emory Healthcare's cancer service line. King highlights a groundbreaking AI-based technology that, for the first time, can assess a woman's future risk of breast cancer using a routine mammogram — an advance that could fundamentally reshape early detection and prevention.

Our feature articles begin with a story on the transformative potential of genetic testing. By offering a highly individualized understanding of inherited cancer risk, genetic insights are enabling clinicians to tailor surveillance, prevention and treatment strategies with unprecedented precision. Treatment itself is becoming more targeted, as biomarkers — such as specific genetic mutations — now guide many therapy decisions, leading to more effective and less toxic care.

Emerging technologies are sharpening this precision even further. We explore endovascular robotic surgery, a pioneering approach at Winship that integrates advanced imaging, robotics and data-driven planning. This technique allows physicians to navigate tiny catheters directly to tumors, delivering therapy with remarkable accuracy while minimizing damage to surrounding healthy tissue.

Care delivery is also evolving in more personal and coordinated ways through Winship's multidisciplinary programs, including the Winship Brain Tumor Center. By bringing together diverse specialists, multidisciplinary programs streamline decision-making, expand access to advanced therapies and clinical trials and ensure that each patient benefits from a truly comprehensive approach.

In this issue's patient profile, we meet Alia Martinez, a two-time Winship patient whose story reflects both resilience and hope. Successfully treated for germ cell ovarian cancer at age 22, Martinez faced a second diagnosis — breast cancer, 14 years later. Through it all, she has maintained a positive outlook, a deep commitment to her family and a passion for giving back, including her involvement in the annual Winship 5K and Fashion a Cure event.

Our philanthropy section features a piece reflecting on the personal experiences with cancer that inspire philanthropy. We close with our Inspiring Hope interview, featuring Colleen Lewis, senior vice president of cancer nursing for Winship and Emory Healthcare, whose leadership continues to shape compassionate, patient-centered care.

Thank you for your continued interest and support — on behalf of our clinicians, researchers and, most of all, our patients.

With deep appreciation,

SURESH S. RAMALINGAM, MD, FACP, FASCO

WM TRAILBLAZERS

Meet four of Winship's outstanding research scientists whose day-to-day work is changing the game in important ways for people with cancer.

LISA FLOWERS

Board-certified obstetrician-gynecologist **LISA FLOWERS** *specializes in the treatment of women with abnormal pap tests, HPV-related disease and pre-cancerous gynecologic conditions. She is a professor in the Department of Gynecology and Obstetrics at Emory University School of Medicine. She joined the Emory faculty in 1999. Flowers is active on many national and state committees aimed at improving the quality and delivery of care and service to patients with cervical and breast disease, including work with the American Society for Colposcopy and Cervical Pathology, the American Cancer Society and the Susan G. Komen Breast Cancer Foundation's National Hispanic/Latina Advisory Council.*

WM: New federal screening guidance expanded cervical cancer testing with an at-home HPV (human papilloma virus) option. Your research has found that self-screening is highly effective in increasing the number of women who are screened for cervical cancer. Why is self-screening an important option for women?

LF: Women's attitudes toward HPV self-screening are generally very positive. Most find it acceptable, and many actually prefer it over having a clinician perform the test. Self-screening for HPV allows women to be in control of the screening process, have less discomfort from the speculum exam and receive cervical cancer screening in clinic settings with clinicians who may not be experienced in conducting pelvic and speculum exams. Self-collection helps remove common barriers to screening, like inconvenience with work and life issues, embarrassment, discomfort and lack of privacy.

Many international and limited national studies have supported the preference of self-collection versus clinician collection, including a large U.S. study where 71.5% of respondents said they were open to self-collection, and nearly half said they would actively choose it over clinician collection. Choosing self-collection was especially strong among women who were overdue for screening or had never been screened. Seeing the positive response to self-collection for primary HPV in my research demonstrates opportunities to expand this into rural areas and medical deserts in Georgia which can help reach women who are currently missed by traditional approaches.

WM: In the Spring/Summer 2025 issue of Winship Magazine, we talked about your cervical cancer screening work with women in Nigeria and Panama. Please explain how the lessons learned in these other countries are useful for improving cancer screening and care for women right here in Georgia.

LF: In Nigeria, using "Mentor Mothers" — women from the same communities with shared backgrounds and lived experiences — helped us reach people who often face barriers to care, including mistrust, low health literacy and limited engagement with the health care system. In Panama, the challenge was geographic. Many women live in remote mountain villages, so programs focused on same-day screening and treatment to avoid lack of follow-up once patients returned home.

These experiences highlight the importance of patient-centered approaches, like self-collection and "see-and-treat" models, that allow screening and treatment to occur in a single visit when appropriate. The same lessons apply in places like rural Georgia and urban medical deserts. Expanding point-of-care screening — paired with digital diagnostics and treatments like thermal ablation — can allow nurse practitioners

and physician assistants to deliver effective care, especially in areas with few gynecologists.

WM: What are you most excited about in your research right now?
LF: What excites me most right now is the team we've built — a true translational powerhouse of scientists all committed to reducing HPV-related cancers in the U.S. and globally. We share a deep passion for eliminating these preventable cancers, especially cervical and anal cancers, and we're driven to move research from the bench to the clinic in ways that are timely, meaningful and impactful for the patients who need it most.

Our research focuses on finding better, simpler ways to prevent and detect cervical cancer early. We are developing quick tests that can be used at the point of care to look for HPV and other cancer-related proteins. We are also using artificial intelligence to improve digital colposcopy and microscope-based tissue analysis, helping doctors spot precancerous changes in the cervix more accurately. In addition, we study complementary and alternative medicines as possible treatments for precancerous lesions in the cervix and anus.

What makes it special is how we work together in testing these novel innovations — we value each other's strengths, challenge one another's ideas and refine them, and stay grounded in compassion for the communities we serve. We're united in the goal of improving outcomes for everyone, regardless of where they live or their socioeconomic status. Doing this kind of groundbreaking work alongside people who are not just colleagues, but friends, makes it incredibly fulfilling every single day. WM

VALENTINA GRAJALES

VALENTINA GRAJALES *is a urologist specializing in urologic oncology, including the surgical management of cancers of the prostate, bladder and kidney. She is director of urological oncology at Emory University Hospital Midtown. Grajales is an assistant professor and serves as associate director for global health in the Department of Urology at Emory University School of Medicine. She also serves as director of the department's undergraduate medical education.*

WM: In your research on penile cancer treatment, you and your fellow researchers focused on the treatment's mental health impact. One article concluded that survivorship models should integrate timely mental health support and address access disparities. How can mental health support be incorporated in the care provided to men affected by penile cancer?
VG: That's a really important question, because one of the biggest takeaways from our study is that a significant proportion of patients will ultimately develop anxiety or depression. This means we need to address the problem before it develops and affects patients' quality of life. Support should be offered from the very beginning rather than added later after problems arise. In my practice, I offer all my penile cancer patients pre-treatment counseling through our Winship Psychiatric-Oncology program. Receiving a cancer diagnosis is already overwhelming, and then realizing that treatment may involve irreversible, life-altering and potentially disfiguring surgery can be incredibly difficult. It is essential to create a safe environment where we can openly discuss potential changes in body image, sexual function and identity. Validating patients' concerns and normalizing these conversations can make a meaningful difference. Sometimes it may take a few visits for patients to open up, which is why it is important to do regular check-ins at every follow-up visit. Having embedded support from social workers, psychologists or psychiatrists within our clinics can make access much easier, rather than expecting patients to seek help on their own. This approach also helps address some of the disparities in access to care.

Peer support is another powerful tool, especially for patients who are not able to access psychiatric care or who face transportation barriers. Many support groups meet online, allowing patients to connect with other survivors who are going through or have gone through the same diagnosis and treatment. Having that sense of community helps reduce isolation and stigma, particularly around a disease like penile cancer. Ultimately, the goal is to make mental health care as routine and accessible as surgical follow-up.

WM: Along this line, why is it important to support the mental health of anyone undergoing cancer treatment — and is that support regarded today as more important than perhaps it used to be?
VG: Mental health support is critical because cancer doesn't just affect the body; it affects every aspect of a patient's life. Patients are often dealing with uncertainty, fear, changes in identity, physical changes and financial hardship, all of which can contribute to depression, anxiety and social withdrawal. We now understand that mental health disorders can greatly impact treatment success, whether through physiological stress on the body or a patient's ability to adhere to treatment and follow-up care. Historically, cancer care was focused on survival and mental health was rarely part of the conversation. For many patients, mental health was a source of stigma and taboo. But as treatments have improved survival, there has been a shift toward quality of life and survivorship. Mental health is no longer an afterthought; it is becoming a cornerstone of comprehensive cancer care.

WM: What excites you most about your research right now?
VG: What excites me most is that we are showing at a population level what we see in our daily practice. This data can help inform other urologic oncologists of the significant psychological impact of penile cancer treatment. This study allows us to better identify patients who may be at higher risk of developing mental health conditions so we can target their support early in their cancer experience.

I'm also really excited about where this work can go next. There's a great opportunity to incorporate patient-reported outcomes and better capture the lived experience in a more meaningful way. Ultimately, I think this can help move us toward more holistic, patient-centered care. WM

PHILIP LUPO

PHILIP LUPO'S *research focuses on leveraging population-based resources — such as birth defects and cancer registries — to identify novel genetic and environmental factors that can predispose children to birth defects, childhood cancers and other pediatric disorders. The ultimate goal of his work is to develop targeted prevention strategies and interventions to improve the health outcomes in affected children. Lupo is a member of Winship's Cancer Prevention and Control Research Program. He co-directs the Research and Epidemiology for Adolescent and Child Health (REACH) Center in the Aflac Cancer and Blood Disorders Center at Children's Healthcare of Atlanta and is the Lucky Jain-Raymond Schinazi Distinguished Professor in Pediatrics in the Department of Pediatrics at Emory University School of Medicine.*

WM: Please describe a prevention strategy or intervention that has come from the type of research you are doing — and how it has improved health outcomes in affected children.
PL: Importantly, our team and others have found that more than 15% of children diagnosed with cancer also have a cancer predisposition syndrome or some other congenital disorder. Cancer predisposition syndrome (also known as hereditary cancer syndrome) is a genetic condition where an inherited gene mutation significantly increases an individual's risk of developing certain cancers, often at a younger age than the general population. These syndromes, which account for up to 10% of all cancers, involve germline mutations passed from parent to child. We have recently taken results from these studies to implement prevention and intervention strategies for children at risk of developing cancer. These strategies include identifying children at risk for developing cancer through newborn screening and following them in cancer predisposition programs to intervene at earlier stages. These efforts have demonstrated improved outcomes and survival for children diagnosed with cancer who also have a cancer predisposition.

WM: Is a child's genetic ancestry only one of the influences on cancer outcomes? Is it the dominant influence? Or does your research show that genetic ancestry may be more influential on outcomes in certain cancers than in others?
PL: The factors associated with cancer outcomes are numerous, and include demographic, social, clinical and molecular characteristics — and these factors vary by the type of cancer. We are interested in genetic ancestry in

relation to acute lymphoblastic leukemia (the most frequent pediatric cancer) because it appears to influence disease biology and toxicities, as well as treatment response. That said, it is not the most influential factor. In fact, as part of our recently funded NCI SPORE, titled the "Reducing Disparities in Acute Leukemia (REDIAL) Consortium," we are hoping to incorporate multiple factors into novel risk prediction models for children diagnosed with acute lymphoblastic leukemia.

WM: What are you most excited about in your research right now?
PL: I am most excited by our collaborations to leverage what we have learned in terms of genetic predisposition to pediatric cancer and implement prevention programs for children at risk of developing cancer, as well as for their family members, who may also be at elevated risk of developing cancer. In other words, making pediatric cancer "preventable" is what excites me. WM

JEAN LOUISE KOFF

JEAN LOUISE KOFF *is a hematologist specializing in the treatment of lymphoid malignancies. She joined Winship's clinical staff as a practicing physician in 2016. Koff is a clinical investigator in the Bone Marrow and Stem Cell Transplant Center, with a disease focus in lymphoma. As an associate professor in the Department of Hematology and Medical Oncology at Emory University School of Medicine, Koff's academic focus is in epidemiology, outcomes and translational research in lymphoma. She has a particular interest in the intersection between autoimmune disorders and lymphoid malignancies.*

WM: In 2025, the National Cancer Institute (NCI) awarded a $12.1 million, five-year Specialized Program of Research Excellence (SPORE) grant to support a new multi-institutional effort aimed at improving outcomes for patients with lymphoma. In partnership with investigators from other institutions, you co-lead the SPORE as co-principal investigator and one of its three research projects, the Administrative Core and the Developmental Research Program. Please explain why this research matters for people with lymphoma.
JLK: The Lymphoma Outcomes SPORE will focus on understanding how patient ancestry, lymphoma biology and survival are connected. The goal is to advance precision medicine and eliminate health disparities in the diagnosis and treatment of this complex disease.

This research is important for patients with lymphoma because it aims to improve how the disease is understood and treated, especially for those from African American and Hispanic communities. When patients from these groups are underrepresented in research, it can lead to less accurate information about how their specific forms of lymphoma behave and how they might respond to treatment. Our research has shown that in addition to factors like limited access to health care, some African American patients with aggressive lymphoma also have specific genetic changes in their tumors and differences in the tumor environment that could affect how the disease progresses and responds to treatment. By studying the unique genetic and biological features of lymphoma in these populations, doctors can develop treatments that are more effective and better suited to their needs.

WM: How does this research strengthen and accelerate discovery and translation into equitable outcomes when multiple research institutions focus on a common goal?
JLK: By focusing on the biology of aggressive lymphoma in communities that have historically been underrepresented in research, we can better understand the unique features of lymphoma across multiethnic populations. This approach could lead to more personalized treatment strategies, including testing new treatments using specialized lab models and improving health care delivery in communities that serve these groups.

WM: What most excites you in your research right now?
JLK: I'm thrilled to be working with a talented team of researchers who bring diverse expertise to the table, from genomic sequencing and digital pathology to clinical trials and community outreach. Despite our different areas of focus, we all share a common goal: to improve access to personalized treatments and better outcomes for patients with lymphoma. By combining our efforts, we aim to ensure that all patients — regardless of background — receive the treatments most effective for their specific needs, ultimately improving survival rates and quality of life for everyone affected by lymphoma. WM

RETHINKING HOW WE SCREEN FOR BREAST CANCER

AI TOOL SUPPORTS PERSONALIZED BREAST CANCER SCREENING STRATEGY

By Tari A. King

Breast cancer remains the leading cause of cancer death in women in 110 countries. The American Cancer Society estimates that in 2026, about 322,000 new cases of invasive breast cancer will be diagnosed in women in the United States, and about 42,000 women will die from the disease.

Screening plays a critical role in detecting breast cancer earlier, when treatment is often more effective and outcomes are improved. But screening is not only about finding cancer. It is also an opportunity to better understand a woman's future risk and, in some cases, intervene before cancer develops. Personalized screening depends on accurately assessing an individual's likelihood of developing breast cancer within a specific timeframe.

That is where many traditional approaches fall short.

Current screening guidelines have relied heavily on age and family history to determine who should be screened, when screening should begin and how often it should occur. Yet many women diagnosed with breast cancer do not have a family history of the disease. Younger women are also being diagnosed more often, raising important questions about whether existing models identify everyone who could benefit from earlier or enhanced screening.

ILLUSTRATION BY GARY WATERS

At the same time, interpreting mammograms is complex. Radiologists review large volumes of images and make decisions based on subtle findings. As with any highly specialized field, performance can be influenced by many factors, including case complexity and variation among patients. These realities underscore the need for better tools to support both patients and clinicians.

AI IS CHANGING BREAST CANCER SCREENING

Recent advances suggest artificial intelligence may help transform how breast cancer risk is assessed. In 2025, the U.S. Food and Drug Administration authorized an AI-powered platform designed to predict a woman's risk of developing breast cancer within a five-year period using only a standard mammogram. Winship is in the final stages of outlining a plan to pilot the technology at Emory Breast Imaging Centers.

AI in breast imaging is evolving in several ways. Some tools are designed to help detect cancers already visible on imaging. Others assist with measuring breast density, an important factor because women with extremely dense breasts face higher risk of developing breast cancer, and dense tissue

can make cancers harder to detect on mammograms. Additional tools now focus on predicting future risk.

That distinction is important. Risk-prediction tools are not searching for a cancer that is already present. Instead, they analyze patterns within the mammogram to estimate the likelihood that cancer may develop in the coming years. Early data suggest these new AI tools may outperform many traditional risk models in identifying which women are at average, intermediate or elevated risk.

HOW THE TECHNOLOGY WORKS

The AI tool analyzes information within a mammogram that is not visible to the human eye. Rather than focusing on signs of existing cancer, the system identifies image-based patterns associated with future cancer risk.

The AI model was developed using hundreds of thousands of mammograms from diverse patient populations, including women who did and did not go on to develop breast cancer within five years. By analyzing those data sets, the system "learned" which imaging patterns were associated with higher or lower future risk. The model was then validated on additional mammograms.

Researchers often evaluate prediction tools using a measure called area under the curve, or AUC. A score of 0.5 is no better than chance. Traditional models based largely on personal and family history often fall in the 0.60 to 0.65 range. AI-based models have reported performance closer to 0.72 to 0.73, suggesting improved accuracy in predicting five-year breast cancer risk.

Another notable advantage is equity. Traditional risk models have historically underperformed in some populations, particularly among minority women. Data on the AI models suggest more consistent performance across groups, including Black and Asian women.

The AI model may also help track changes in risk over time. That creates opportunities to evaluate whether lifestyle changes, medications or other prevention strategies are reducing risk, something that has long been difficult to measure in real time.

WHAT AI-SUPPORTED SCREENING COULD MEAN FOR PATIENTS

One of the most promising aspects of AI-supported risk assessment is that it can be integrated into routine mammography. Because many women already participate in regular breast screening, that existing visit becomes an opportunity to gather more personalized information without requiring a separate test.

This could help identify women at elevated risk who might otherwise be missed by traditional models. It may also help guide next steps more efficiently, such as whether a patient may benefit from supplemental screening with MRI or contrast-enhanced mammography, discussion of risk-reducing medications, referral to prevention programs or enrollment in clinical trials. At the same time, it may help reassure women who are not at increased risk and do not need additional testing.

The goal is not to replace physician judgment or patient choice. AI does not make treatment decisions or mandate care. It provides another layer of information that patients and providers can use together through shared decision-making.

Traditional risk tools can be useful for estimating risk at the population level, but they are less precise at the individual level. Personalized AI-based assessment may help close that gap by giving women and their clinicians better information to shape a screening strategy tailored to their needs.

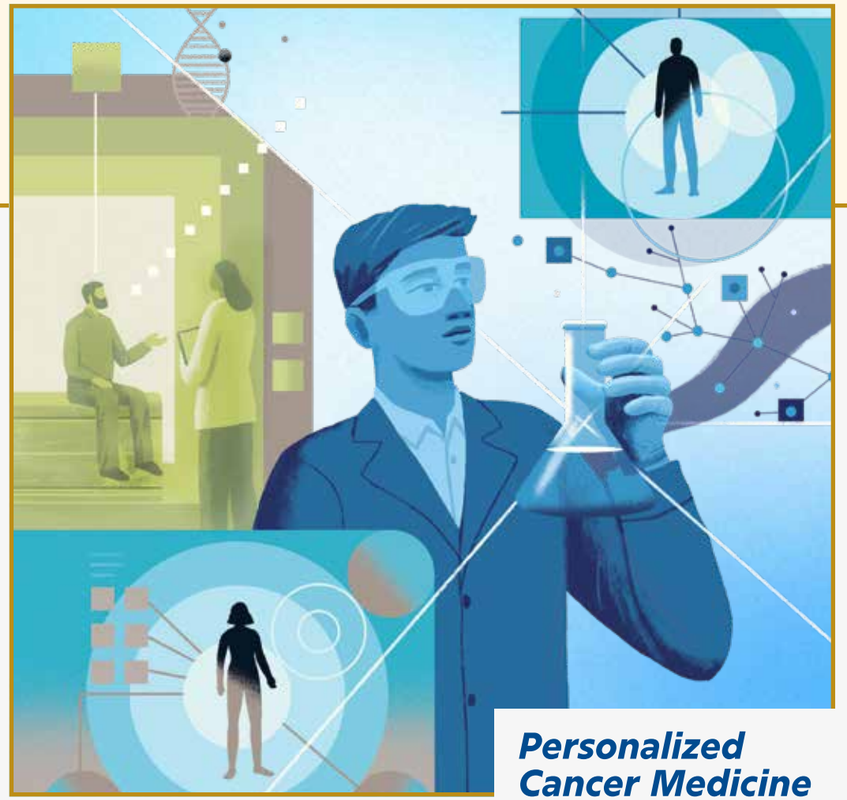
MOMENTUM IN NATIONAL GUIDELINES

The 2026 National Comprehensive Cancer Network guidelines for breast cancer risk assessment now incorporate the use of AI-based risk models. The guidelines recommend that women identified as being at elevated risk through validated AI models be considered for care pathways that may include enhanced screening, discussion of preventive medications and clinical trials when appropriate.

That recognition could have important downstream effects. As AI-informed screening becomes part of guideline-concordant care, it may improve access to additional imaging and prevention services for women identified as being at higher risk.

This is an exciting moment in breast cancer prevention and risk assessment. For the first time, we are moving closer to truly personalized risk assessment that provides actionable information to tailor screening and the ability to monitor risk over time. If widely implemented, tools like this could help ensure that any woman receiving a mammogram — wherever she lives — has access to more individualized insight about her breast cancer risk and ultimately to better strategies for screening and risk reduction. **WM**

TARI A. KING is the Nancy Stonecipher Professor in Cancer Innovation and chief of the Division of Breast Surgery in the Department of Surgery at Emory University School of Medicine. She also serves as chief surgical officer for the cancer service line at Winship Cancer Institute of Emory University and Emory Healthcare.



Personalized Cancer Medicine

KNOWLEDGE IS POWER

Why understanding your genetic cancer risk matters

By Martha Nolan • ILLUSTRATION BY MATT CHINWORTH

Sixteen years after beating thyroid cancer at age 50, Debbie believed she was doing everything right. She never missed a follow-up appointment. She stayed on top of her mammograms and colonoscopies. She was determined to stay one step ahead of cancer.

Then her younger sister was diagnosed with breast cancer — and tested positive for a CHEK2 mutation, which increases the risk of breast cancer and several other cancers. Debbie decided to get tested too. When she learned she carried the same mutation, her doctors added breast MRI to her routine screening.

That decision likely saved her life.

Her mammogram looked normal. The MRI did not.

It revealed ductal carcinoma in situ — an early-stage breast cancer that had likely been present for years but had gone undetected. Debbie chose to undergo a double mastectomy, grateful the cancer was found before it spread.

"Had I not found out that I had a CHEK2 mutation, I probably wouldn't have found the cancer until it had spread to other parts of my body," she says.

Today, the impact of that single genetic test extends far beyond Debbie. Her sons, siblings, nieces and nephews have pursued testing. Those who carry the mutation now begin screenings earlier and more frequently — equipped with information that allows them to act, not react.

"Knowing they carry a CHEK2 mutation allows my family members to plan their next steps," Debbie says. "It's been life-changing."

WHY GENETIC TESTING MATTERS

Genetic testing like Debbie's can identify inherited mutations that significantly increase cancer risk — often before cancer develops. Knowing whether someone carries a hereditary mutation allows doctors to tailor screening schedules, recommend preventive strategies and, in some cases, guide more targeted treatments. It also gives family members critical information about their own potential risk.

"Knowing your genetic predisposition is not about predicting fate," says Christine Stanislaw, director of genetic counseling at Winship Cancer Institute of Emory University. "It is about planning for the future."

HOW COMMON IS HEREDITARY CANCER?

Not all cancers are hereditary. In fact, most are not.

"We say roughly about 5% to 10% of cancers are hereditary," Stanislaw says. "For ovarian cancer, it's as high as 20% to 25%."

That distinction matters. Hereditary genetic testing examines healthy cells — usually through a blood or saliva sample or a cheek swab — to look for mutations a person was born with. This differs from genomic testing performed on tumor tissue, which helps guide treatment decisions but does not necessarily indicate inherited risk.

"We expect tumors to have all sorts of mutations," says Suzy Cahn, genetic counselor for Winship and Emory Decatur Hospital. "The question is: Were you born with one of those mutations, or did it develop only in the tumor cells? If it's just in the tumor, it can affect treatment, but it wouldn't impact future cancer risk or family members."

Understanding that difference helps patients know what hereditary testing can — and cannot — tell them.

WHO SHOULD CONSIDER TESTING?

Certain diagnoses immediately raise suspicion of a hereditary component. Everyone diagnosed with pancreatic adenocarcinoma or ovarian cancer, for example, meets national criteria for genetic testing. Breast, colorectal and endometrial cancers diagnosed at age 50 or younger also meet testing criteria, as does triple-negative breast cancer diagnosed at age 60 or younger.

Even people without cancer may consider testing if they have a strong family history. And sometimes healthy individuals — particularly those who are adopted or have limited family history information — pursue testing for clarity.

The testing looks for specific genes associated with inherited cancer risk. The most well-known are BRCA1 and BRCA2. "We've known about the breast and ovarian cancer risk associated with mutations in BRCA1/2 for a long time," Cahn says. "But now we know these gene mutations also increase the risk for prostate cancer, pancreatic cancer and sometimes melanoma."

Another relatively common hereditary condition is Lynch syndrome, which increases the risk of colorectal and endometrial cancers, as well as certain other gastrointestinal and ovarian cancers.

Importantly, testing is never automatic — even when criteria are met. Genetic counseling is an informed consent process.

"We explain why we're thinking about it, what the potential results could mean for that person and their family," Stanislaw says. "Ultimately, it's up to the patient to decide."

Some patients decline testing because they feel overwhelmed by a new diagnosis. Others worry about the emotional weight of learning additional risks.

"People cope with information differently," says Fabienne Ehivet, lead genetic counselor at Emory Midtown, Emory Saint Joseph's and Emory Johns Creek hospitals. "Some say, 'How much testing can I have?' Others say, 'I don't need to know more right now.'"

UNDERSTANDING THE RESULTS

Genetic test results typically fall into three categories: positive, negative or inconclusive.

A positive result identifies a mutation known to increase cancer risk and triggers specific screening and prevention recommendations. A negative result can be reassuring, although it may not fully explain a strong family history.

The third category — a variant of uncertain significance (VUS) — can be frustrating. "This is not an uncommon result," Stanislaw says. "It means we found a change in a gene, but we don't yet know whether it's associated with cancer risk. We just have to sit with that uncertainty."

Misconceptions are common. Some patients believe genetic testing will tell them whether they currently have cancer. "That's not what we're doing," Stanislaw says. "We're looking at cancer risk."

A positive result does not guarantee someone will develop cancer. And a negative result does not eliminate the need for routine screening. After all, most cancers — 90% to 95% — are not hereditary.

That's why reviewing results with a genetic counselor is critical. "We can explain why we're thinking about offering testing and what the potential results could mean for that person and their family," Stanislaw says. "Ultimately, it's up to the patient to decide."

HOW A POSITIVE RESULT CHANGES CARE

A positive result can feel overwhelming — but it can also be empowering.

"A lot of the genetic mutations associated with hereditary cancer increase the risk for more than one type of cancer," Stanislaw says. "So it may alert us to something we weren't previously watching for."

In practical terms, that often means earlier screening, more frequent screening or additional types of surveillance. Someone with a BRCA1 or BRCA2 mutation, for example, may qualify for enhanced breast imaging, ovarian cancer risk management and, in some cases, pancreatic cancer screening.

Some patients may also consider risk-reducing surgery, such as preventive mastectomy or removal of the ovaries and fallopian tubes. These decisions are deeply personal and made after careful conversations about risks, benefits and timing.

At Winship, patients with hereditary mutations can be referred to specialized

CHRISTINE STANISLAW

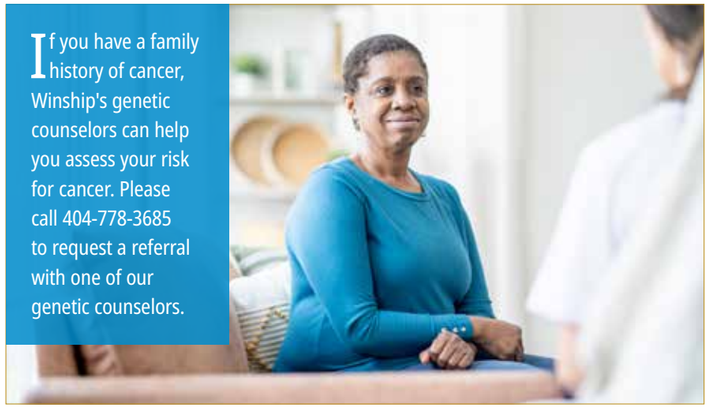
SUZY CAHN

FABIENNE EHIVET

high-risk clinics focused on surveillance and prevention. “They will be followed closely, with all of their screenings coordinated through that clinic,” Cahn says. “It creates a medical home where patients have a team that understands their specific genetic risk.”

These clinics offer coordinated multidisciplinary care, updated prevention guidelines, family counseling, lifestyle education and access to research or clinical trials.

The goal is not just early detection. It’s prevention whenever possible — and long-term support tailored to each patient’s genetic profile.



If you have a family history of cancer, Winship's genetic counselors can help you assess your risk for cancer. Please call 404-778-3685 to request a referral with one of our genetic counselors.

THE FAMILY FACTOR

For many people, genetic testing is not just personal — it’s generational.

With most hereditary cancer syndromes, first-degree relatives — parents, siblings, children — have up to a 50% chance of carrying the same mutation.

“This testing can help them know what to watch for and get on a screening plan that could catch something early — or even prevent it,” Cahn says. “We can change what the future looks like for that family.”

INSURANCE AND COST

Some people are concerned about insurance discrimination if they test positive for a hereditary form of cancer. But federal protections under the Genetic Information Nondiscrimination Act (GINA) prevent medical insurers from using genetic information to deny coverage or raise premiums.

Life, long-term care and disability insurance are not covered under GINA, but many patients already have policies in place before testing. Genetic counselors discuss these considerations during pre-test education.

Genetic testing cost is another frequent concern. Fortunately, it is far less of a barrier than it once was. “In general, cost is less of a barrier than it used to be, especially for our affected cancer patients,” Cahn says.

Insurance often covers testing when national criteria are met, and many laboratories offer financial assistance programs or affordable self-pay options.

A GROWING ROLE IN PERSONALIZED MEDICINE

Genetic information is increasingly integrated into cancer care.

“We’re seeing more providers interested in including genetics in personalized treatment,” Ehivet says. “It’s definitely expanding to a larger population than we used to offer before.”

National guidelines are evolving. Many experts anticipate that hereditary testing will soon be recommended for nearly all patients with certain solid tumors, such as breast and colon cancer.

For referring physicians, the collaboration is seamless. Oncologists submit electronic referrals, often marking urgent cases when surgical decisions depend on genetic results. Genetic counselors are co-located within oncology clinics at several Emory hospitals, facilitating close communication and rapid turnaround.

“It’s very much a team approach,” Ehivet says.

ONE MESSAGE TO REMEMBER

If there’s one takeaway the genetic counseling team emphasizes, it’s this: Don’t assume. Learn your family history. Share it with your providers. And if you have concerns, seek guidance before drawing conclusions.

“Before doing genetic testing, it’s a good idea to meet with a genetic counselor,” Ehivet says. “Find out if you really need it and how to use that information.”

For Stanislaw, the bottom line is simple. “It can give great information and help prevent cancers for patients and their family members down the line,” she says.

In a field where early detection saves lives and prevention is often possible, knowledge isn’t just power — it’s protection. **WM**

MARTHA NOLAN *is a writer/editor for Emory Healthcare.*

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ILLUSTRATION BY MATT CHINWORTH

Personalized Cancer Medicine

Helping to diagnose, prognose and guide treatment

HOW BIOMARKERS ARE CHANGING CANCER MEDICINE

By John-Manuel Andriote

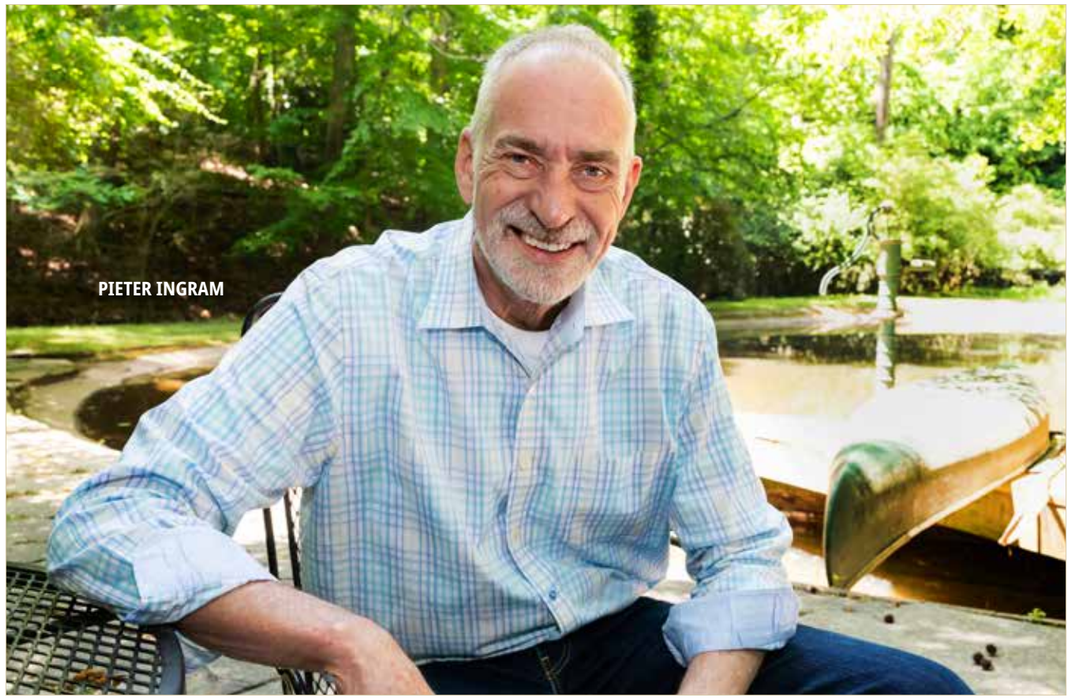
Pieter Ingram came to Winship Cancer Institute of Emory University after he was diagnosed with Stage 4 lung cancer and told he had two months to live.

He had been through a gamut of treatments at another cancer center — chemotherapy, immunotherapy, radiation. Nothing worked.

But there was one thing that caught his oncologist’s eye: Ingram’s tumor had a B-Raf mutation, a genetic alteration in the B-Raf gene that acts as a “driver” in various cancers, causing normal cells to become cancerous by signaling them to divide uncontrollably.

Biomarkers, such as the B-Raf mutation, are used to identify disease early, much as blood pressure is used to gauge cardiovascular health. They can be proteins, genes or mutations, imaging results (CT scans, X-rays) or physiological measures such as blood pressure and heart rate. Biomarkers also are useful for helping to determine how a disease progresses or how a patient responds to treatment.

Ingram’s doctor referred him to Suresh S. Ramalingam, a globally renowned lung cancer expert and Winship’s executive director. Ingram became


PIETER INGRAM

patient number one in a clinical trial for a new drug aimed specifically at his particular cancer indicated by the B-Raf mutation.

That was six years ago.

Ingram continues on the drug, now FDA-approved — and is very much alive at age 61. He lives with the medication's side effects — fatigue, skin problems, diarrhea. "But," he emphasizes, "if you compare that to having cancer, I'm fine!"

WHY BIOMARKERS ARE KEY TO PERSONALIZED TREATMENT

With respect to cancer, a biomarker is anything measurable that provides information about a cancer. It may or may not play a causal role in the cancer itself. A biomarker can help diagnose, prognose or guide treatment. It can tell a doctor whether a cancer will respond to certain treatments. Targeting treatments specifically for an individual's particular tumor can lead to fewer side effects and better quality of life.

Prostate-specific antigen (PSA) in men is a familiar example of a biomarker. In fact, "it's one of the best biomarkers," says medical oncologist Jacob E. Berchuck, an attending physician at Winship and an assistant professor in the Department of Hematology and Medical Oncology at Emory University School of Medicine. It can be used to help assess risk of prostate cancer and also serves as a measure of the cancer's response to treatment. "If it stays undetectable following treatment, this indicates that the cancer is in remission," Berchuck says. "If the PSA starts rising, then we're worried about cancer recurrence."

What's really exciting, he says, "is that discoveries about certain biomarkers in one cancer type may apply more broadly across other cancers, which can help us deliver targeted therapies we might not otherwise have considered."

Some biomarkers are described as "tumor-agnostic," meaning they correspond to a variety of different types of cancer. For example, HER2 (human epidermal growth factor receptor 2) — most widely associated with a subset of breast cancer — has also been found in gastric and other malignancies. This knowledge has allowed researchers to further discover that HER2-targeted therapy works in those patients, too — leading to FDA approval of a therapy for anyone who is HER2-positive and has a solid tumor.

HER2 is an example of a biomarker that is also a molecular driver of cancer, a genetic or molecular change that actively causes and sustains tumor growth. HER2 over-expression — called HER2-positive — both drives tumor growth and serves as a targetable biomarker.

Berchuck says, "We're fortunate that we now have an advanced understanding of the molecular drivers of a lot of cancers. This allows us to understand what's driving an individual's cancer and tailor therapies to target it more precisely."

In fact, Berchuck says it's the increased understanding of biomarkers that has driven most advances in cancer treatment in the last two decades.

"Before we had biomarkers and a deeper understanding of what drives cancer, we relied on relatively crude treatments like chemotherapy, which often didn't work well. Now, with the ability to define tumor drivers and personalize treatment, cancer outcomes have improved dramatically. These advances have made precision medicine possible and have been truly transformative for patients."

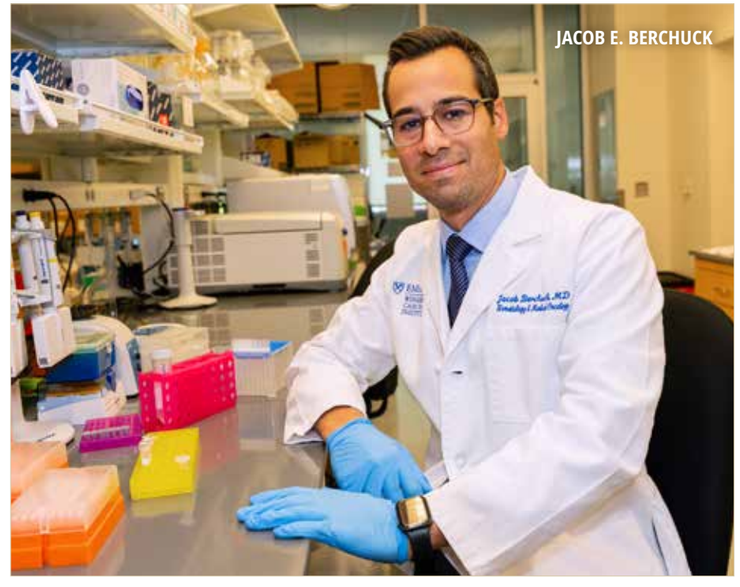
BIOMARKER TESTING

Biomarker testing in cancer medicine is any test on a patient or their tumor sample that is used to make some determination of whether the patient should be treated or monitored a certain way. "There are very few cancers where a biomarker is not used to determine treatment" Ramalingam says. "So in this day and age, biomarker testing is part of just about every type of cancer."

Ramalingam notes that among people with non-small cell lung cancer (NSCLC), 15% have never smoked. But, "often in those patients we find specific mutations in their tumors that can be treated with targeted therapy."

Without biomarker testing, those potential targets for therapy would be unknown. And yet, as the research literature shows, biomarker testing isn't routinely done for patients with lung cancer. Ramalingam says the potential reasons for not testing might include insufficient tumor tissue from a biopsy, the need to begin treatment before test results are available or even the hospital system or part of the country where the patient receives care.

He points out that Winship routinely performs biomarker testing for all patients with lung cancer, even for those with advanced-stage disease. "There are barriers at multiple levels," he says. "I think we've seen improvement, but there's still a lot of work to be done in terms of ensuring that every patient with lung cancer who is a candidate for biomarker testing undergoes biomarker testing before treatment decisions are made."


JACOB E. BERCHUCK

Likewise, for other types of cancer. "Personalized testing is how we have been able to make significant progress in the fight against cancer," Ramalingam says. "When you have narrowed it down to what is specifically driving this patient's cancer, and you bring a treatment that is very specific for that, the success rate is much higher."

PERSONALIZING TREATMENT

As with other cancer types, those researching genitourinary tumors are "also very much exploring and investing in biomarker-based treatment," says Mehmet Asim Bilen, director of Winship's Genitourinary Medical Oncology Program and a professor in the Department of Hematology and Medical Oncology at Emory University School of Medicine. "We really want to try to match the right drug with the right patient," he says.

FGFR3 inhibitors are among the current standard-of-care treatments for metastatic bladder cancer. "But now our chemistry is improving," Bilen says. "AI is advancing as well. As a result, our drugs are becoming more refined, with increasingly selective inhibitors.

The beauty of those selective inhibitors is we are able to maximize the efficacy but at the same time minimize the toxicity."

For this reason, Bilen says a lot of research and

SURESH S. RAMALINGAM

clinical trials are focused on selective inhibitors. "In bladder cancer, we are enrolling patients in a clinical trial, which we started in Phase 1 and now is expanding, for selective FGFR3 inhibitors where we don't see the same level of side effects, but they are very active drugs." He points to other selective inhibitors on the horizon too for urothelial cancer and prostate cancer, among others.

Imaging is also used in biomarker testing, such as PSMA for prostate cancer. If a PET scan confirms that a tumor is positive for PSMA, radioligand therapy can be used to bind to the PSMA and radiate the tumors. For kidney cancer, different biomarkers are being used. "For example," Bilen says, "we're using a biomarker to guide the development of treatments — like CAR T cells, bispecific antibodies, antibody-drug conjugates or small molecules — so they work better, cause fewer side effects and ultimately lead to better outcomes for patients."

The traditional way of discovering and developing new drugs for cancer meant focusing on one type of tumor. If it worked, fine. If not, move on to the next potential drug. If it did work for a tumor type, a new clinical trial would need to be developed to try the drug on another tumor type. Now there are so-called "basket trials." They are also tumor-agnostic in that eligibility for participation depends on having a certain biomarker — rather than a particular cancer.

This allows researchers to test a drug for multiple types of cancer at the same time. At Winship, Bilen says, "We use our Phase 1 program for this kind of a basket trial where we can quickly move things forward for enrollment and hopefully get an FDA approval as quickly as possible."

MEHMET ASIM BILEN

This matters. "Everyone knows that if you minimize the time between discovery and a positive trial, you are able to make the drug available to our patients as quickly as possible."

HOW AI IS MAXIMIZING BIOMARKER-DRIVEN TREATMENT EFFECTIVENESS

"The truth is that in spite of all the different treatments we have, we know that most treatments don't work in more than 30% — if you're lucky, if you've got an outstanding drug, maybe 40% — of patients," says Anant Madabhushi, executive director of the Emory Empathetic AI for Health Institute and professor in the Wallace H. Coulter Department of Biomedical Engineering at Emory University and Georgia Institute of Technology. "This means most patients are not benefiting from these therapies."

Madabhushi adds, "We need to do better. That's where I think there's a huge opportunity with these AI-based approaches to infer these biomarkers, both from CT scans as well as pathology images, to predict who is going to truly respond. Who is going to benefit, who is not going to benefit."

He has been looking at routine data-pathology images and radiographic images trying to discern features and patterns that can tell us about such factors as outcome, prognosis, survival, progression, treatment response and treatment benefit. He references one biomarker that has been written about: the twistedness of the vessels of a tumor, which is able to predict treatment response, especially with immunotherapy. "We can use AI to pull out information from routine CT scans and tell us who's going to respond to immunotherapy and who's not going to respond," Madabhushi says. "That's been wonderful."

Madabhushi says it's now possible to start to infer gene expression data directly from so-called H & E (Hematoxylin and Eosin) slides, the primary diagnostic tool in cancer pathology. The slides are thin slices of tissue, typically fixed, embedded in paraffin and stained to highlight cell nuclei in blue-purple and cytoplasm and connective tissue in pink, allowing pathologists to identify cancer, cell morphology and tumor architecture. "Now we can start to make predictions about what kind of mutations might be present," Madabhushi says. "We can start to infer the cell types at a more granular level — at a single-cell level."

Over the last 20 years, Madabhushi says researchers have built algorithms to pull out features that pathologists could see. Just in the last 12 to 18 months, he says, "We are entering rapidly into territory where we are progressively going into the data and pulling out sub-visual features that nobody can see."

This means new AI models that will marry the features that can be seen and the features that can't be seen — including the genomics of the tumor — to create very powerful predictors for outcome and treatment response and benefit. "This has really been a game-changer," Madabhushi says.

"With AI, we are now able to get better and better in making these predictions even in advance of the therapy. So if you have that information, maybe you might want to think about slightly modulating or changing the course of treatment for a given patient because you know that, maybe there's a patient for whom, even though the treatment might work, it might cause significant harm to them because of cardio toxicity or because they're frail. And if you could get that from the AI, then that allows the clinician to modulate how they approach treatment management for that particular patient."

ANANT MADABHUSHI

As exciting as these AI developments are for cancer medicine, Madabhushi says it's also exciting to learn that the same AI tools can be used "not just within the context of a comprehensive cancer center, but really in low- and middle-income countries." He mentioned a call the morning of our interview with colleagues in Zambia, and ongoing collaboration to bring these technologies to India through a partnership with the Tata Cancer Center in Mumbai, the country's largest cancer center.

Madabhushi says, "Working through a cloud-based infrastructure, the algorithms are able to work on the data, generate the predictions and send it back to the ordering physicians or clinicians anywhere on the globe." He adds, "It really has the opportunity to help reduce the disparities between the haves and the have-nots. I think that's very, very exciting."

Right here in Atlanta, the advances in technology and understanding what causes and drives cancer and how precisely to treat it are as personal as it gets for someone like Pieter Ingram.

In his case — as it is for an ever-growing number of others who face cancer — it's been the difference between getting handed a terminal diagnosis versus still being alive and carrying on more than six years later. As Ingram puts it, "It's just unheard of that you survive — or, rather, you get back to no detectable cancer. It just doesn't happen. So yes, it's a very good story." **WM**

JOHN-MANUEL ANDRIOTE *is editor of Winship Magazine.*

Personalized Cancer Medicine

THE PATH OF PRECISION

Winship is first in the world to enhance cancer care with new endovascular robotics technology

By Andrea Clement

In the interventional radiology suite at Emory University Hospital, the tools and scene look familiar: imaging screens glow, catheters are carefully advanced and a multidisciplinary team works in quiet coordination.

ILLUSTRATION BY MATT CHINWORTH

But something new is happening in this otherwise familiar scene.

Instead of standing at the patient's side, guiding a wire through blood vessels by hand, the physician sits or stands at a console, navigating the patient's vessels with a controller more reminiscent of a video game than a traditional medical device. With subtle movements, they steer a microcatheter through a complex network of arteries, targeting a tumor with remarkable precision.

This is endovascular robotics — an emerging technology that is beginning to reshape how physicians deliver minimally invasive, image-guided therapies. At Winship Cancer Institute of Emory University, clinicians and researchers are among the first in the world to bring this approach into real patient care, opening new possibilities for targeting cancerous tumors and treating other complex conditions.

A NEW WAY TO NAVIGATE THE BODY

For decades, interventional radiologists have relied on a highly refined but demanding technique: manually guiding thin wires and catheters through the body's vascular system, navigating toward a precise destination using imaging as their map.

"It is a challenging skill to master and still is a bit of skill tied to luck," says Zachary L. Bercu, program director of interventional radiology at Emory University School of Medicine.

Interventional radiology is a medical specialty focused on treating disease using minimally invasive, image-guided techniques. Rather than making large surgical incisions, interventional radiologists use tiny catheters and wires to navigate through blood vessels and deliver therapy directly to the source of disease. In cancer care, this includes procedures such as tumor embolization and targeted chemotherapy, allowing physicians to treat tumors from within while minimizing damage to surrounding healthy tissue.

Endovascular robotics builds on this foundation, enhancing the precision and control of these procedures in ways that were not previously possible.

Rather than relying solely on hand movements, physicians use a controller to advance, rotate and position wires and catheters with fine-motor precision. The system translates those inputs into highly controlled movements inside the body.

"Endovascular robotics takes that methodology and allows us to perform it using an input controller," Bercu says.

PRECISION THAT CHANGES CANCER TREATMENT

Many of the most advanced interventional oncology procedures depend on navigating to extremely small, complex blood vessels that supply tumors.

For treating liver cancer, liver-directed therapies such as Y-90 radioembolization entail delivering microscopic particles carrying radiation directly into those tumor-feeding arteries. The effectiveness of the treatment depends on how precisely those particles are delivered.

"In many cases, the more sub-selective we can get, the more we alter the risk-benefit ratio for our therapy," Bercu says. "We can deliver far more treatment into the tumor and far less into normal tissue."

That level of precision is becoming increasingly important as cancer care moves toward more personalized approaches.

Advances in dosimetry, the science of measuring and delivering radiation, now allow clinicians to tailor treatments based on tumor characteristics, vascular anatomy and patient-specific factors. Robotics may further enhance that capability by enabling physicians to reach vessels that were previously difficult or impossible to access.

For David Prologo, division director for interventional radiology at Emory University School

of Medicine, that precision translates directly to patient outcomes.

"In oncology, precision is everything," says Prologo, who is also a researcher in Winship's Discovery and Developmental Therapeutics program. "This technology allows us to navigate directly to the blood vessels that are feeding a tumor and deliver therapy exactly where it's needed, while minimizing the impact on surrounding healthy tissue."

Unlike systemic therapies that circulate throughout the body, these treatments are delivered locally.

"We're blocking the tumor's blood supply while also delivering chemotherapy or radiation directly to the tumor," Prologo says. "That allows us to treat the cancer effectively without exposing the rest of the body to the same level of side effects."

When using liver-directed therapies such as Y-90 radioembolization, that level of precision can make a meaningful difference in outcomes. Tumors in the liver often receive their blood supply from specific arterial branches, while healthy liver tissue relies more heavily on other sources of blood flow. By carefully navigating to those tumor-feeding vessels, physicians can deliver radiation in a highly targeted way, concentrating treatment where it is needed most while preserving as much healthy liver as possible.

This approach also reflects a broader shift in cancer care toward personalization. Rather than treating all tumors in the same way, interventional radiologists can tailor therapy based on the size, location and vascular characteristics of each tumor. Robotics may further enhance that capability by allowing physicians to consistently reach smaller or more complex vessels, helping ensure that treatment is delivered with greater accuracy and consistency.

For patients, that precision can translate into fewer side effects and more treatment options. Because therapy is delivered directly to the tumor, patients may avoid some of the systemic effects associated with traditional chemotherapy, while still benefiting from a highly effective, targeted approach.

A PLATFORM FOR THE FUTURE OF CANCER CARE

For researchers like Amir Pourmorteza, associate professor in the Department of Radiology and Imaging Sciences, the significance of endovascular robotics extends far beyond a single device.

His work focuses on integrating robotics with advanced imaging, software and intelligent navigation systems to create a more comprehensive platform for image-guided intervention.

"The central goal is to make endovascular procedures more precise, more efficient and safer, especially in complex anatomy," Pourmorteza says.

In his lab, he and his team are developing real-time 3D imaging techniques that allow physicians to better visualize the position of catheters and guidewires inside the body, all while significantly reducing radiation exposure.

Using advanced X-ray pulse programming, his team has already achieved dramatic reductions in radiation dose, with ongoing work pushing those limits even further.

"Reliable low-dose 3D guidance is the foundation for safe navigation," he says. "It allows us to understand exactly where we are relative to the vessel walls and surrounding anatomy."

This work is part of a broader initiative known as TRITA: Tomographic Reasoning for Interventional Task Autonomy, which explores how imaging, robotics and artificial intelligence can work together.

Looking ahead, Pourmorteza envisions systems that can assist with specific navigation tasks under physician supervision.

"If AI is helping with navigation," he says, "the question becomes: What is the fastest and safest way to perform a procedure?"

One of the most promising aspects of this work is how it brings together robotics, advanced imaging and intelligent software into a single system. Together, these tools can help physicians navigate complex anatomy more precisely, improving how therapies are delivered directly to tumors.

In practice, that may mean clearer visualization during procedures and more intuitive navigation through difficult-to-reach blood vessels. Over time, these advances could support more efficient and consistent treatment, while allowing physicians to focus more fully on decision-making and patient care.

A DIFFERENT EXPERIENCE FOR PATIENTS

For patients, the impact of this technology can be immediate. What's more, the technology is not limited to treating cancer, but can be applied to a range of conditions.

"What excites me most about this technology is how it allows us to treat patients in a far less invasive way," Prologo says. "In many cases, we can perform procedures through a tiny pinhole incision, which means patients recover faster and get back to their normal lives much sooner."

For at least one of Prologo's patients, the development of this technology couldn't have come soon enough.

After years of living with symptoms of an enlarged prostate, Ronnie Kite was preparing for surgery that would have required a hospital stay and weeks of recovery. Instead, he became one of the first patients in the world to be treated using the robotic system.

Within days, the 58-year-old returned to his normal routine, even winning a championship tournament with his amateur hockey team. His only regret about the procedure is that he wishes it had been available even sooner, he told The Atlanta Journal-Constitution earlier this year. He's grateful to have been among the very first in the world to experience the benefits of this minimally invasive technology.

"For patients with conditions like an enlarged prostate, this approach can be life-changing," Prologo says. The same applies for patients being treated for cancerous tumors of the prostate, liver or other organs with complex vascular systems.

EXPANDING ACCESS TO ADVANCED CARE

One of the most transformative aspects of endovascular robotics is its potential to expand access to specialized care.

Currently, only a fraction of U.S. counties have access to interventional radiologists, creating significant disparities in care.

As the technology continues to evolve, its potential extends beyond increasing precision, to improving access. Many patients today, especially in rural areas, do not have access to highly specialized procedures. Telerobotics could help bridge that gap by allowing experts at centers like Winship to guide procedures remotely, bringing advanced care closer to where patients live.

At the same time, endovascular robotics reflects a broader shift in medicine: combining physician expertise with technology to improve how care is delivered. These systems can make complex procedures more precise and more consistent. Over time, they also may expand into a more complete toolkit for minimally invasive treatments, from targeting tumors to treating other vascular conditions — all with the goal of improving outcomes while reducing risk and recovery time.

"I imagine a future where the center of excellence can reach the patient if the patient cannot reach the center of excellence," Bercu says. The ultimate hope and aim for this remote robotics technology is that it will one day enable such procedures to be conducted across town instead of just across the room.

Endovascular robotics is still in its early stages, but its trajectory is clear.

"We're now able to treat conditions, including certain cancers, with less invasive, more precise approaches that, in some cases, weren't possible before." Prologo says. WM

ANDREA CLEMENT, *a longtime writer and health care media professional, serves as Winship's associate director of public relations.*

Personalized Cancer Medicine

FROM WAFFLE HOUSE TO WINSHIP

How a 25-Year-Old Man Became a Patient of Winship's New Brain Tumor Center

By Kira Goldenberg

Just before Christmas 2025, Joe Bowers was waiting in the vestibule of a Waffle House near his Gainesville home to be seated with his family when, suddenly, he fainted.

"My left arm just started shaking back and forth," says Bowers, 25. "I realized something was wrong, and I called out for my dad, who was right there. I later learned they thought I was pulling a prank on them. Then the world slowly went black."

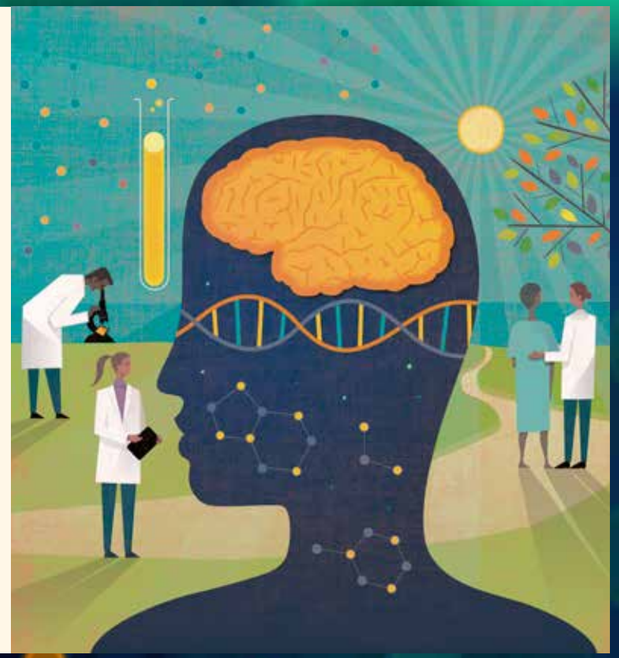


ILLUSTRATION BY ROCCO BAVIERA

Bowers was transported to a local emergency room, where, based on brain imaging, he was initially diagnosed with multiple sclerosis (MS). But then an MS specialist examined the pattern of masses in his brain. As Bowers remembers it, he was told: "Nah, it's probably cancer. You should go to Emory."

When Bowers got to Winship Cancer Institute of Emory University, his neurosurgeon, Edjah K. Nduom, used the same set of imaging to diagnose Bowers with grade 4 IDH-mutant astrocytoma. This type of astrocytoma is an aggressive, fast-growing brain cancer that begins in astrocytes — the cells that help support and structure the central nervous system. Instead of forming one clearly defined tumor, it spreads into surrounding brain tissue, creating multiple poorly defined tumor areas rather than a single, distinct mass.

Nduom is "very smart and very experienced," Bowers says. Nduom, who is also the director of the Winship Brain Tumor Center and a professor in the Department of Neurosurgery at Emory University School of Medicine, performed a craniotomy, a common brain cancer surgery that involves making a small hole in the skull to remove tissue to confirm the diagnosis.

After waiting a month to heal, Bowers returned to Winship to meet with all the doctors who would be part of his treatment team going forward — in one convenient appointment. In addition to Nduom, he saw a neuro-oncologist and a radiation oncologist focused on brain tumors, one after another. Neuroradiologists, pathologists and clinical trial coordinators were also available for consultation.

WINSHIP'S NEW MULTIDISCIPLINARY CLINIC FOR BRAIN TUMORS

Bowers' need for specialized diagnostic and medical care arose the same month that Winship opened the Winship Brain Tumor Center (BTC), its new multidisciplinary clinic for the treatment of brain tumors. The center was born out of a concerted effort to bolster Winship's brain tumor offerings across the board — from diagnosis to treatment to research.

The clinic, located on the plaza level in Winship's Building C on Emory University Hospital's Clifton campus, was launched in December 2025. It's a space where patients with brain tumors can meet with their entire treatment team — whose members are actively consulting one another on the case before and during the appointment.

"It has transformed care for our patients," Nduom says. "Patients love it. Providers love it. I leave energized from BTC more than I do on any other normal clinical day."

The time in clinic allows for efficient, collaborative care, a distinct departure from the medical norm, in which

EDJAH K. NDUOM

there is a lag between every related appointment as patients navigate different provider schedules and providers set aside time in their own calendars to study imaging and schedule consults.

In addition to optimizing efficiency, the Winship BTC elevated its diagnostic capabilities when Emory recently became the only institution in the region to offer DNA methylation testing, a diagnostic method that can pinpoint brain tumor characteristics more precisely than standard pathology.

"What I called a glioblastoma in 2016 was probably six to eight distinct diseases that we all treated the same," Nduom says. With the methylation profiling technology in-house, he says they have actionable diagnostic information within two weeks — rather than the six- to eight-week wait when samples are sent to an outside lab.

Brain tumors are complex diseases with many permutations. When time is of the essence, cutting down on care team appointments and diagnosis time doesn't just save time — it can save lives.

"Patients living with brain tumors require a lot of care from multiple different specialists," says Laura Donovan, co-director of Winship's Neuro-Oncology Program and medical director of the Winship Brain Tumor Center. "It's such a great opportunity to see patients and then have a meeting in real time with all the subspecialists involved in their care to come up with a multidisciplinary plan."

LAURA DONOVAN

Nduom recently recruited Donovan from Columbia University to build up the clinical side of the Winship BTC. She spoke about plans to extend the center's reach through more patient offerings — like palliative care and rehabilitation services — as well as to serve patients with brain metastases and a tumor-causing genetic condition, neurofibromatosis, rather than solely treating primary brain tumors.

Donovan — along with recently hired neuro-oncologist Byram Ozer, co-director of the Neuro-Oncology Program and director of Translational Research in Neuro-Oncology at Winship — also plans ultimately to leverage the BTC Center's increased presence and infrastructure to help keep patients in-house as they transition from pediatric to adult brain cancer care. Previously, patients who have had pediatric brain tumors that require ongoing care beyond childhood were referred out to other practices in the community, since their cancers are considered distinct from adult-onset diagnoses.

"What I look forward to is a situation where Dr. Ozer and I will work together to see patients across the lifespan," says pediatric neurologist Timothy R. Gershon, a member of Winship's Cell and Molecular Biology Research Program, director of the Children's Center for Neurosciences Research and a professor in the Department of Pediatrics at Emory University School of Medicine. "We need to focus on transitioning patients' care from childhood through adulthood. "

Continuity of care for former pediatric patients is just one of a variety of treatment innovations the brain tumor team is working toward incorporating into their standard care practices.

Through the Emory Proton Therapy Center, Winship is the only cancer center in Georgia with access to this form of radiation treatment that allows for more precisely targeted dosing. This is helpful in treating many different cancers, but it's especially important for mitigating side effects when dealing with the brain and central nervous system, where an off-target hit of radiation could cause major side effects.

Winship is also the only cancer center in the state to offer laser interstitial thermal therapy, thanks to the expertise of Kimberly Hoang, assistant professor in the Department of Neurosurgery at Emory University School of Medicine. She uses an MRI-guided laser to avoid more invasive surgeries when tissue in question is nestled in complicated locations. "It's a minimally invasive procedure to burn away the bad tissue, a much smaller treatment area than other brain surgeries that we do," Hoang says.

BYRAM OZER

TIMOTHY R. GERSHON

A THIN LINE BETWEEN TREATMENT AND RESEARCH

Of course, Winship's neurosurgeons continue to perform standard operating room surgeries. But even then, the subsequent tissue samples in some cases help further research in addition to offering pathology results for individual patients. It's difficult to draw a hard line between treatment and research, another integral part of the brain tumor team's focus.

"It's kind of like this feed-forward mechanism where everything is just going to get better," says radiation oncologist Lisa Sudmeier, assistant professor in the Department of Radiation Oncology at the Emory University School of Medicine who participates as a clinician in the BTC and runs a research lab looking at harnessing the immune system to treat brain cancer. "The patient care is going to help the research become stronger, and the research is going to help us learn more and develop better care for the patients."

KIMBERLY HOANG

LISA SUDMEIER

Neurobiologist and research pharmacologist Renee Read, for example, partners with neurosurgeons to enroll brain tumor patients in studies where they receive promising new drugs before surgery, then analyzes removed tumor tissues to gauge how well these treatments may work.

"The surgeons hand the tissue to us, and we're able to ask: Does the drug even reach the brain? Does it reach the tumor?" says Read, co-leader of Winship's Cell and Molecular Biology Research Program and an associate professor in the Department of Pharmacology and Chemical Biology at Emory University School of Medicine.

Read and Nduom are currently collaborating on some of this research. A past collaboration identified a potential drug, originally approved to treat rogue blood vessels, that could be repurposed as a new treatment for glioblastomas, aggressive brain cancers diagnosed in both adults and children, with a median survival of just 12–18 months.

"Connecting amazingly cool basic science questions about how the nervous system works along with the unmet needs of patients and families is exciting from a research standpoint and motivating from a more human standpoint," Read says.

Read is also collaborating with Gershon on finding strategies to improve immune responses to T-cell therapy in children with malignant brain tumors. They are looking at responses in both mouse models and organoid models, 3D systems where scientists try to replicate human biological tissues as closely as possible.

"By coming at it from two perspectives at the same time you get a better view of the real situation," Gershon says. "The reality of cancer research," he adds, "particularly if you're trying to do something translational, is that cancer is really hard to cure. If it were easy, it would've been fixed by now."

Tobey MacDonald, director of the Pediatric Neuro-Oncology Program in the Aflac Cancer and Blood Disorders Center of Children's Healthcare of Atlanta and professor of pediatrics at Emory University School of Medicine, is a pediatric hematologist-oncologist and a member of the Cell and Molecular Biology Research Program at Winship. He also uses patient samples — with parent consent — in his work with Georgia Tech nanoengineer A. Fatih Sarioglu. Together they have developed a one-of-a-kind blood test that can pull out exceedingly rare cancer cells in the blood to track brain tumor growth over time and tell whether they are responding to treatment. They are currently focusing on medulloblastoma, a pediatric malignant brain tumor that develops in the cerebellum, the brain's motor control center. He describes the test, using a 3D-printed nanoscale chip, as a filter that works akin to panning for gold.

"My hope is this really translates into a clinical benefit for our patients," says MacDonald, who was inspired to enter medicine after growing up with two older sisters struggling to live with Type 1 diabetes. "This is the most excited I've been in my career that we might be able to really make a difference."

INCREASING ACCESS TO CLINICAL TRIALS

In addition to innovative research, Winship BTC faculty are focused on increasing patient access to clinical trials.

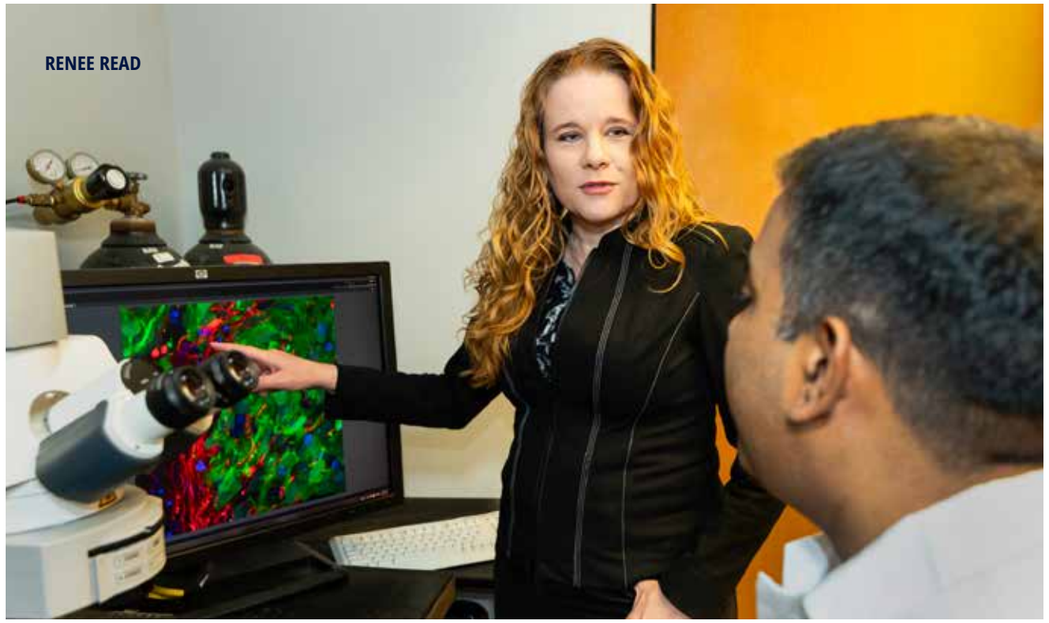
"We're really looking to grow our trial portfolio," Donovan says. Around the same time Nduom hired her to build out the MDC's clinical offerings, he also recruited fellow neuro-oncologist Ozer from the National Cancer Institute to bolster the department's research offerings.

In less than a year, Ozer has helped shepherd a local site for at least three national studies as well as multiple Winship-generated ones, exploring everything from implanting radiation devices during initial neurosurgery to cutting-edge immunotherapy techniques.

"I keep thinking, 'I'm in the honeymoon period — it's going to end,' but so far it still feels honeymoonish," Ozer says. "It's been really fun and exciting and stimulating work."

Many of the clinical trials are led by laser interstitial thermal therapy expert Hoang.

"Clinical trials generally give you access to things that you would not normally have access to in standard-of-care therapy. You're on the cutting edge," she explains to patients potentially interested in participating in a trial arm. Additionally, "people who are in clinical trials are followed, for better or worse, more closely than those who are not in clinical trials," she notes. "Most people would appreciate that their physicians and the clinical



RENEE READ

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trial staff are watching so closely."

Hoang is especially interested in device-based therapeutics but, as a principal investigator, she works on everything from decreasing steroid-induced psychosis in patients with brain cancer to technological advances in finding tumor margin lines.

"We know not all brain tumors are a terrible diagnosis, but a lot of them still have a not-great prognosis," Hoang says. "I think that challenge — to be able to take something from the bench to the bedside — is actually quite complicated in the United States." She adds, "It keeps my job as a surgeon interesting."

GETTING ON WITH TREATMENT — AND WITH LIFE

In the midst of all the growth of Winship's brain tumor team, Joe Bowers' treatment plan is on track. He temporarily moved to Atlanta to begin proton therapy in March, which he is doing in conjunction with a year-long oral chemotherapy regimen, a standard-of-care treatment he selected from options the brain tumor team presented to him.

"When you have something as big as cancer, you need to hit it as hard as you can as fast as you can," he says.

After a recovery period post-craniotomy that included relearning how to move his left arm, Bowers is "more or less back to normal." He was focused, prior to starting his course of radiation, on planting blueberry and raspberry bushes in his yard so his toddler son can harvest them in summers yet to come.

He is also focusing on his faith, his young family and the moments of levity available — which brings him back to the place his saga started.

"Waffle House was the most iconic place for that to happen," Bowers says of his initial cancer symptoms appearing at the quintessential Atlanta-based diner chain. "You always hear about crazy stories happening in a Waffle House, and it's referenced in all my medical notes, which I just find hilarious." **WM**

KIRA GOLDENBERG *is a writer and psychotherapist in San Francisco.*

WATCH MORE | Learn more about Winship's Brain Tumor Center by scanning the QR code.

Second Time Around: Telling her story, her way

By John-Manuel Andriote

ALIA MARTINEZ WITH HER FAMILY AT THE 2025 WINSHIP 5K.

As if enduring cancer once isn't challenging enough, marketing consultant Alia Martinez of Smyrna, Ga., faced cancer for a second time 14 years after her first encounter.

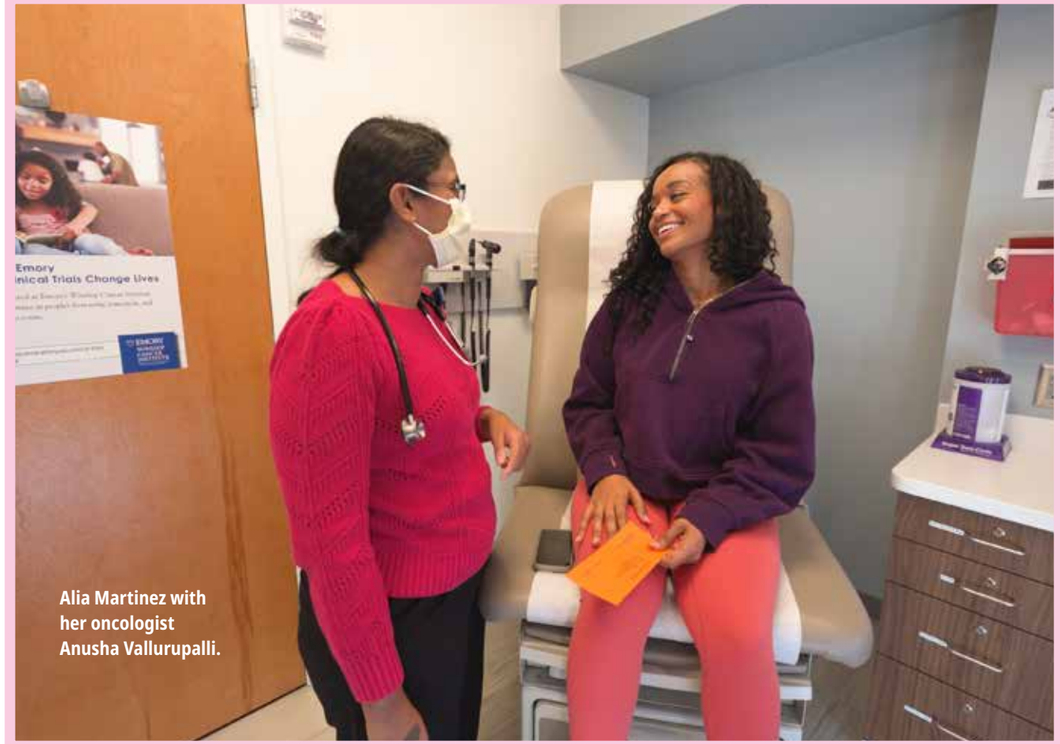
Diagnosed with germ cell ovarian cancer at age 22 in 2011, Martinez, now a 37-year-old mother of two, was diagnosed again in 2025 — this time with breast cancer. "I lived a normal life for almost 14 years," Martinez says.

Germ cell ovarian cancer is a rare, highly curable cancer that arises from egg-producing cells. It typically affects children, teenagers and young women (average age 19).

After receiving her ovarian cancer care at Winship Cancer Institute of Emory University, Martinez says that when she needed treatment for breast cancer "it was a no-brainer as far as where to go for my treatment."

Although no one in Martinez's large extended family had experienced ovarian cancer, there were people in both her parents' families who'd had breast cancer. "It was a shock to all of us — especially because I was so young — but what wasn't a shock was the breast cancer."

Martinez had done genetic testing in 2011, but she says the results were inconclusive. More recent testing



Alia Martinez with her oncologist Anusha Vallurupalli.

confirmed a genetic variant. "At the end of the day, yes, I was diagnosed with this," Martinez says, "but I'm really thinking about my children and their children — and what I could do today to really be proactive and make sure that they live a healthy and 'scare-free' lifestyle."

SECOND TIME AROUND

Martinez's breast cancer diagnosis stemmed from a routine visit to her OB/GYN, who felt a lump in her breast and sent her to a specialist. After a mammogram and biopsy, the results confirmed breast cancer.

"I'm a very glass-half-full, positive person," Martinez says. "But I did not have it on my bingo card that I was going to get diagnosed with cancer for the second time. It was definitely a shock — especially because this time around I have two little children that I have to take care of."

Her passionate commitment to be there for her children steeled her determination to get through her second cancer experience. "I had a will of determination that no matter what, I was going to live for my children," Martinez says. "I was going to live for my husband. I was going to live for my two little brothers."

"I think the hardest part for me was actually telling my two younger brothers and my mom again — because they had lived through it once. Cancer is tough on the person with it, but it's also tough on the people around you."

She cried, for sure. "But then I wiped my tears and went and picked up my kids, and I probably hugged them longer than I hugged them in a while."

Martinez is clear that the one "blessing" cancer brings is a new appreciation for life and love. But she stresses that cancer should never "define" anyone. "Was it scary? Yes, but I wasn't going to let it be something that debilitated me in any way."

TELLING HER STORY, HER WAY

"One thing that I'm super proud of is that I would be the one who was writing my story," Martinez says. "I would be the one that was going to be proactive in telling people what happened because I'm so proud of myself that I did catch it early and I have options."

The first time she dealt with cancer, Martinez says she "hid it" from a lot of people. In her large family with roots in Ethiopia, personal health issues weren't commonly discussed openly. "It wasn't necessarily something that I was ashamed about. It's just that in my culture and tradition, you kind of keep things very close. And I didn't want people to treat me differently. So nobody knew I had ovarian cancer. They just knew that I was a little sick and I might have lost hair."

This time, Martinez has approached her cancer experience differently. "I think I was doing myself and the people around me a disservice the very first time that I was diagnosed," she says. "So when I was diagnosed the second time, with breast cancer, I shouted it from the rooftops because what I didn't want is for people to continue to think that cancer is this bad word and that it's something that they have to shy away from."

The impact of openly sharing her story has led two people close to her to share their own experiences with cancer. "I think it's important to share your story because you never know who you're going to help in the long run," Martinez says. She adds, "I think it's so important to tell your story and to tell people, 'Take your health seriously, be proactive, get cancer screenings and health screenings — because then you have a plethora of options versus being forced into potentially one or two."

SURROUNDED AND LIFTED UP

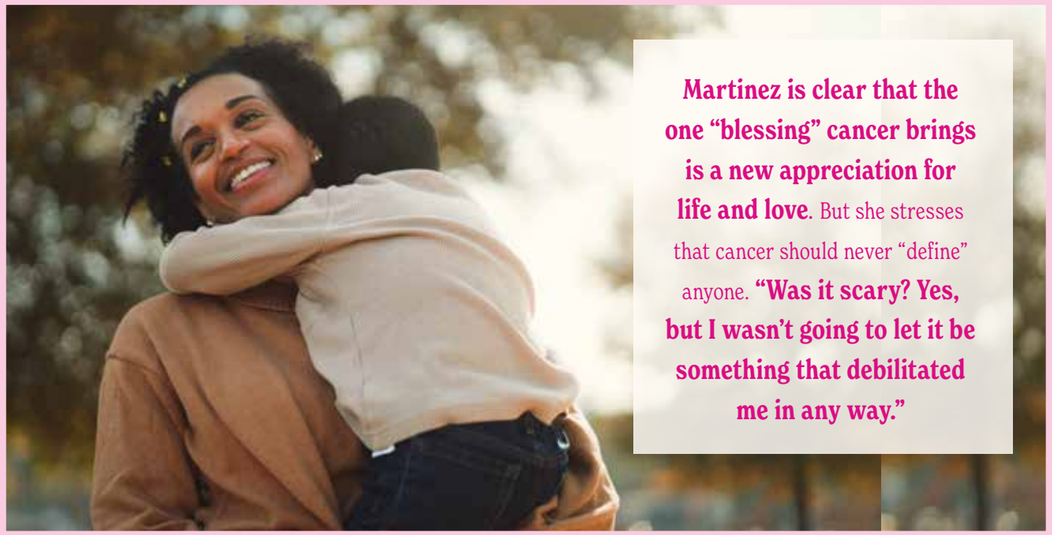
Martinez's husband Jemir was with her when she received her breast cancer diagnosis — and has remained her number one support. "He changed my dressings after surgery and he was . . . incredible," she says. "My husband has been to every single doctor's appointment, every single infusion."

Then there's her mom. "My mom is like Mother Teresa reincarnated," Martinez says. She takes care of the children — three-year-old Idris and four-year-old Amir — while Martinez is getting her infusions. "And then I have two amazing brothers and their wives, and I have cousins all around me."

The family's love and support overflowed one particular day. "I remember the day of my double mastectomy. I got home after the surgery and there were like 30 people in our house. You would think that there was a party just because of the number of people that were there, but they just wanted to know that I was okay. So they came every day for weeks, just giving me food and giving me comfort."

Martinez gives credit where it's due. "I'm here today, yes, because I have this determination. But it is because

ALIA MARTINEZ WITH HER FAMILY AT THE PARK.



Martinez is clear that the one "blessing" cancer brings is a new appreciation for life and love. But she stresses that cancer should never "define" anyone. **"Was it scary? Yes, but I wasn't going to let it be something that debilitated me in any way."**

of my friends and my family. And I have a strong faith, and it is because of my faith. I am really grateful to them."

RENEWED HEALTH FOCUS

"I'm a lot more vigilant and protective about my health," Martinez says. "I'm a huge advocate for getting cancer screenings. I'm 37 years old. Nobody would think that I would be diagnosed with ovarian cancer, let alone breast cancer, at such a young age. I try to take my health very, very seriously."

This is one way cancer has changed her: "I think it's made me be very proactive in my health, and it's also made me enjoy the little things in life." Now she thinks like this: "Instead of putting off that vacation or putting off that great restaurant that you've always wanted to go to, go ahead and go. More than anything, cancer teaches you that life is short. Surround yourself with people who are going to lift you up."

What would Martinez tell another young woman or mother just beginning her own cancer experience? "I would tell her that you can do this. Women can do anything. I mean, no offense, but we can do a lot. This is just another thing that we're just going to have to tough out and do. And at the end of the day, it's going to be hard. But we can do hard things. This is not a death sentence. It's just another thing that you're going to have to do." **WM**

JOHN-MANUEL ANDRIOTE *is editor of Winship Magazine.*

Every step gets us closer

The Winship 5K Run/Walk is a family-friendly event, offered both virtually and in person, held on the Emory University campus. Join us on October 3, 2026, and you'll be supporting cancer research and treatment advances at Winship Cancer Institute that help patients live longer, healthier lives.

Register for Winship 5K:
winship5k.emory.edu

Running and Shining with Gratitude

One way Martinez likes to show her gratitude for her care at Winship is by participating each year in the annual Winship 5K since its inception in October 2011. At the time, she had just been declared cancer-free after her bout with ovarian cancer. "I've been doing it every single year since the very beginning. I've lived in different places and we would always come back for the Winship 5K."

Martinez says she always walked the 5K — until she met her husband, an avid runner. "He was definitely the one who encouraged me and pushed me because I get to run. Not everybody gets to run. Not everybody even gets to walk." Recalling the 2025 Winship 5K, Martinez says, "This one was so important to me because I had just gone through surgery a month prior, and I didn't know if I was going to get to walk, let alone run. So I was really challenging myself and pushing myself. But I was able to cross the finish line with a time of around 35 minutes. I don't know if that's a good or bad thing, but I got to do that — and that's something that I will always cherish."

Martinez explains the significance of her 5K team's name, Abyssinian Warriors. "My family is originally from Ethiopia, and Ethiopia is one of the only countries to not be colonized in Africa. And I kind of see it as the Abyssinian warriors were never defeated. So that's kind of like me honoring them by saying cancer will never defeat me and will never defeat us."

Another annual event Martinez attends is Fashion a Cure, a Winship fundraiser to advance research and treatment for cancers affecting women. This year she made her second runway appearance in the fashion show, held at the Piedmont Driving Club on April 28. More than 550 attendees contributed over $650,000, bringing the total raised since the event began in 2013 to more than $3 million. "I think the most joyful and encouraging thing was seeing other patients also walk, celebrating each other, raising awareness for cancer," she says. **WM**

THE BROGAN FAMILY

After Cancer, A New Purpose: The Personal Side of Philanthropy

By Tyler Wilson

For Justis Brogan, cancer is no longer an abstract cause or a line item on a corporate giving spreadsheet. It is personal.

In 2024, Brogan's wife, Ginny, was diagnosed with Hodgkin lymphoma. Their world quickly narrowed to a series of appointments, scans and anxious waits — for answers, for options and ultimately for hope. They found that hope at Winship Cancer Institute of Emory University, where Ginny's diagnosis was confirmed and she was treated.

"That experience changed everything about how we think about cancer care and the institutions that provide it," Brogan says. "When it's your spouse in that chair, you see very clearly what's at stake."

Today, as federal funding for cancer research becomes less certain, the Brogans' story underscores a growing reality: institutions like Winship increasingly rely on philanthropy — from individuals and from companies — to sustain world-class research and care. Corporate philanthropy is no longer a "nice-to-have"— for patients and families, it's part of what makes the best possible outcome.

Ginny's diagnosis filled the Brogans' daily schedules with oncologists, infusion rooms and new medical vocabulary. At Winship, they found not only clinical excellence, but also a deeply human approach to care.

THE VIEW FROM THE INSIDE

As treatment progressed, the Brogans experienced the features that make Winship a leading cancer care center: cutting-edge research, access to clinical trials, compassionate support services and facilities designed to support healing. They also recognized how much of that is made possible by philanthropy — support that fills critical gaps and allows Winship to move more quickly, innovate more boldly and care more comprehensively for patients and families.

"When you're in the middle of a health crisis, you realize how much someone else's generosity has already shaped the care you're receiving," Brogan says. "That's a humbling thing. It makes you want to be a positive part of that story for someone else."

For Brogan, the case for philanthropy in cancer research starts with a simple truth: cancer can become personal "in the drop of a hat." It's a disease that touches employees, families and communities across Atlanta and beyond.

HOW CORPORATE LEADERS CAN MAKE AN IMPACT

As the Atlanta business unit leader at McCarthy Building Companies, Brogan is a part of a network of peers from industry-leading organizations across the Southeast region, and he believes that business leadership comes with public responsibility.

"If you're fortunate enough to lead a company, you're also in a position to influence how that company shows up in your community — what you support, what you stand behind," he says. "Cancer research and care should be at the top of that list."

After Ginny's treatment, the couple leaned into Winship's fundraising and community efforts, joining a corporate leadership group for the biennial Winship gala, and making personal pledges — with plans to continue and grow that support in the future. McCarthy Building Companies, in turn, committed $25,000 this year to Winship, complementing the Brogans' personal philanthropy.

"I'm sure that if Ginny had gone through this even five years ago, it would have been significantly different — and probably not in a good way," Brogan says, reflecting on how quickly care options have advanced. "That progress doesn't just happen. It's driven by people and organizations who choose to invest in it."

Brogan frames corporate philanthropy in straightforward terms.

"Being a corporation in a community means that you have to give back," he says. "For the community, but also for your employees who live in the community. It sets the right example for people, and it shows that we're a part of — not apart from — where we live and work."

For McCarthy Building Companies, that commitment extends across the Atlanta market and beyond. These efforts are not just side projects — they are woven into the company's broader mission.

McCarthy's corporate philanthropy is one way it supports institutions like Winship. Another is through its core mission: building projects that strengthen communities. As a national leader in health care construction, McCarthy has built countless complex hospitals, specialty centers and medical facilities across the country, where world-class care, research and healing take place every day.

In health care, McCarthy's approach is intentionally relationship-driven. The work involved in delivering these facilities to communities, Brogan says, is guided by two priorities: protecting patients and staff, and moving the client's vision forward. "We want to understand their philanthropic efforts and support those as well," he adds. "Our goal is to grow that effort — being present in their community, not just on their campus."

For Brogan, his experience as a caregiver has deepened the meaning of that work.

"The work we do in health care construction takes on a different meaning once you or someone you love has sat in a similar medical facility and received treatment," he says. "Our experience helped me understand even more how the actual work we do benefits patients and families."

If there's one message Brogan hopes to leave, it's that corporate philanthropy is an essential part of the cancer-care ecosystem.

"The example we set as corporations is critical, because it's needed to advance the care people give and to keep making things better," he says. "You never know when a medical diagnosis is going to be your story or your employee's story or your neighbor's story. When it does happen, you want the best possible outcome."

And in a time when federal funding for cancer research is uncertain, that kind of commitment — from companies and individuals alike — has never mattered more. **WM**

TYLER WILSON *is the external communications manager for McCarthy Building Companies, Inc.*

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TO SUPPORT WINSHIP CANCER INSTITUTE, contact Jennifer Daly, senior director of development, at jdaly@emory.edu or 404-778-4270.

INSPIRING **HOPE** | *Q&A with Winship's senior vice president of cancer nursing, Colleen Lewis*

WINSHIP MAGAZINE: You began your career as a staff nurse in Winship's Bone Marrow and Stem Cell Transplant Center — and returned to Winship in 2025 as senior vice president of cancer nursing. What is it about Winship that made you want to return at this point in your career?

COLLEEN LEWIS: Winship is where my identity as an oncology nurse was truly shaped. I began my career as a staff nurse in the Bone Marrow and Stem Cell Transplant program, where I learned not only the science of cancer care, but the profound privilege nurses carry in walking alongside patients and families through their most vulnerable moments. Later, serving as a nurse practitioner in the Phase 1 program deepened that foundation, allowing me to care for patients receiving the most innovative and complex therapies while working closely within a highly collaborative academic environment. Those experiences shaped my career.

Returning to Winship at this point feels both full circle and deeply purposeful. Winship has grown tremendously as an academic leader and as a destination for highly complex cancer care. What drew me back was the opportunity to help shape the future of cancer nursing at a time when nursing leadership and innovation matter more than ever. Returning to Winship allows me to honor where I started while contributing to what comes next.

WM: In your role, you lead cancer nursing practice, education, and research care integration across all Winship locations. How do you ensure such a vast enterprise stays focused on patient-centered care, quality, safety and collaboration?

CL: At the center of every decision is a simple but powerful question: What does this mean for the patient and the care team? That focus keeps our work grounded, even across a large and complex system.

We rely on standards of practice, meaningful data and consistent education to ensure high-quality, safe and patient-centered care at every Winship location. When nurses feel supported, heard and connected to the mission, they are empowered to deliver excellence that is both consistent and sustainable.

WM: How are you working to advance the integration of research and teaching with clinical care across Winship and Emory Healthcare?

CL: Winship's strength lies at the intersection of discovery and care delivery. My priority is ensuring that nurses are fully integrated as active contributors in that mission.

Strengthening collaboration between oncology nursing and clinical research teams accelerates the translation of innovation into patient care. When nurses work alongside clinical research colleagues, patients benefit from care that is both cutting edge and deeply compassionate.

WM: What is the unique — and uniquely important — role that nurses play in oncology?

CL: Oncology nurses are the constant in a patient's cancer experience — interpreting complex information, coordinating care, advocating for patients' needs and providing comfort and clarity when it is needed most.

Nurses bridge science and humanity, ensuring that advanced therapies are delivered safely while honoring each patient's values, goals and fears.

WM: How do you inspire hope in patients, their loved ones and your colleagues?

CL: For patients and their loved ones, hope is often found in presence and honesty. It grows through partnership, trust and reassurance that they are not alone in their journey. For colleagues, hope comes from feeling valued, supported and connected to a purpose larger than any one challenge.

As a leader, I try to model optimism grounded in reality, acknowledging the difficulty of cancer care while believing deeply in the impact of our work. I am continually inspired by nurses whose skill, resilience and compassion define our care. Sharing their stories, removing barriers to their practice and investing in their growth are some of the most meaningful ways I know to inspire hope. **WM**


COLLEEN LEWIS

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