



**Atrium Health**  
**Wake Forest Baptist**

# The journey to becoming more

*Atrium Health Wake Forest Baptist  
Comprehensive Cancer Center*



**Marking 50 years as an NCI Designated Cancer Center**

# 2023 Annual Report

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**Ruben A. Mesa, MD, FACP**

Executive Director, Atrium Health Wake Forest Baptist  
Comprehensive Cancer Center  
President, Atrium Health Levine Cancer  
Enterprise Senior Vice President, Atrium Health  
Vice Dean for Cancer Programs, Wake Forest University  
School of Medicine  
The Charles L. Spurr MD Professor of Medicine,  
Wake Forest University School of Medicine



## A Message From the Executive Director

**We are unified by a shared vision to reduce the burden of cancer through our commitment to excellence in cancer research, education, prevention, treatment and survivorship.**

2023 was undeniably an exciting chapter for the Comprehensive Cancer Center as we worked to deliver on our Atrium Health mission to improve health, elevate hope and advance healing - for all.

Since taking the reins as executive director on January 16, 2023, I have been impressed with how our team of teams has effectively realigned clinical operations, research, education, community outreach and diversity, equity, and inclusion efforts to meet the needs of our new, more populated and more diverse catchment area.

We've launched the largest cancer program in the Carolinas and Southeast; now one of the largest in the country. We've dramatically increased the scale of our community outreach and engagement activities. We've forged or deepened academic and community partnerships that greatly enhance our ability to conduct innovative cancer control and prevention research, train the next generation of cancer scientists and address health care inequities.

It's been a Herculean effort and I continue to be amazed at how our 3,500-plus teammates keep pushing forward, fueled by a shared, single mission of reducing the burden of cancer across the Carolinas and beyond.

There have been some lows as well. One of the biggest was losing Dr. William Blackstock, who preceded me as interim director and who succumbed to the very disease he spent his career fighting, cancer.



Yet, through it all, we continued to advance translational, clinical and population-based cancer research with innovative new studies. Investigators at our Cancer Prevention and Control research program partnered with public high schools to kick off a five-year study looking at the health effects of vaping. Our Center for Cancer Genomics and Precision Oncology won a National Cancer Institute grant to develop novel treatments targeting genetic, immunologic and metabolic changes that disproportionately affect Black/African Americans with non-small cell lung cancer.

And we shared what we learned by sending dozens of our investigators to make presentations at major conferences, including the annual meetings of the American Society of Clinical Oncology and American Society of Hematology.

On the clinical care front, we extended our reach by uniting the cancer delivery services of Wake Forest Baptist Comprehensive Cancer Center and Levine Cancer Institute under the name “Atrium Health Levine Cancer.” In addition to bringing together the very best aspects of patient care from both organizations, Levine Cancer greatly expands our capacity to conduct clinical research and community outreach. The addition of Levine Cancer Institute more than doubled our number of active clinical trials, teammates, providers, locations and new patient visits and nearly tripled the number of new cancer cases diagnosed. In 2023, Levine Cancer cared for 35,000 new patients.

Just as importantly, Levine Cancer’s providers and clinical staff found new ways to deliver “the loved one” standard, by which we aspire to care for patients as we would our loved ones. Examples include finding a way to dramatically reduce wait times for transplant patients needing oncology transfusion services and creating a website that provides cancer patients, survivors and caregivers free access to psychosocial services and support groups.

To fulfill our mission of training the next generation of cancer researchers, clinicians and educators, our Cancer Research Training and Education Coordination (CRTEC) team launched our first training program for middle school students and made Comprehensive Cancer Center membership available to trainees. We expect the new membership program to stimulate long-term engagement and help us better track trainee outcomes.

## We bolstered our leadership team with several appointments.



**Glenn Lesser, MD** was promoted to deputy director, where he oversees the renewal of our NCI Cancer Center Support Grant, focuses on increasing team science grants and optimizes synergy between our disease-oriented groups, the cancer service line and our research education and training activities.



**Adebola Adedimeji, PhD, MS, MPH, MBA**, joined us as our inaugural associate director of Diversity, Equity and Inclusion, where he leads efforts to increase the diversity of our leaders, members and staff and decrease inequities in cancer care.



**Nadine J. Barrett, PhD, MA, MS**, was named associate director of Community Outreach and Engagement as part of her broader responsibilities to advance health equity at Wake Forest University School of Medicine and Atrium Health.

Throughout all our efforts, we worked to overcome inequities in health care. Our nurse and population health navigators helped to diversify participation in clinical trials, our lung bus offered free cancer screenings to more communities and our CRTEC team boosted the number of underrepresented groups participating in our medical education and training programs.

We unified clinical trial research by creating a single clinical trial office and institutional review board to oversee research being done across our campuses in Winston-Salem, North Carolina and Charlotte while completing alignment of our disease-oriented teams and disease groups. We expect these initiatives to boost our trial portfolio as well as trial activations and accruals.

*continued on page 6*

Indeed, 2023 gave us a lot to celebrate. It showed us that by encouraging and facilitating unprecedented collaboration among clinicians, scientists, educators and community partners we can leverage our larger size to have a bigger and more positive impact. You can read about these and other highlights in the pages that follow.

We expect to build upon that momentum in 2024 when we will celebrate our 50th anniversary as an NCI-designated Cancer Center.

Our newly opened Proton & Advanced Radiation Center (PARC) is on track to become the first location between Washington, D.C. and Atlanta, Georgia to offer proton beam therapy in the latter half of this year. In addition to saving hundreds of brain cancer patients from having to travel out of state every year, PARC has set the stage for research that will further accelerate the discovery of practice-changing research by our Neuro Oncology Program.

Finally, we are moving forward with our five-year strategic plan, "Our Promise: Your Journey." Developed with considerable input from all our teammates, it will help us work as one seamless team from discovery science through survivorship to decrease the burden of cancer on our patients, communities, and society at large.

Sincerely,



Ruben A. Mesa, MD, FACP



*"Thanks to the integration of the Atrium Health Levine Cancer Institute and Atrium Health Wake Forest Baptist Comprehensive Cancer Center and the launch of our unified Atrium Health Levine Cancer program, we are having a bigger impact in the fight against cancer. Whether it's fast-tracking new screening and detection methods, extending the availability of clinical trials or recruiting and training a new generation of medical care givers, we are transforming medical education, expanding patient-centered research and innovation, defining the next generation of clinical excellence and boosting our ability to help more people become and stay healthy."*

**Eugene A. Woods, MBA, MHA, FACHE**

Chief Executive Officer, Advocate Health



**Atrium Health Wake Forest Baptist  
Comprehensive Cancer Center**



CANCER RESEARCH EXCELLENCE

Atrium Health Wake Forest Baptist Comprehensive Cancer Center celebrates its 50th anniversary as an NCI-designated Cancer Center in 2024. We were designated a Cancer Center by NCI in 1974 and earned our designation as a Comprehensive Cancer Center in 1990. We remain one of the earliest cancer centers to receive an NCI designation and have been continuously funded for more than 40 years.



*“2023 marked the beginning of a transformative, new chapter for our cancer care program. Atrium Health Levine Cancer is now one of the largest and most accomplished cancer programs in the nation. As one unified team, we are in a much stronger position to reduce health disparities in the communities we serve. Our larger footprint also provides Wake Forest University School of Medicine a unique opportunity to expand clinical trials research and scientific discovery and to truly make a difference and positive impact in the prevention, detection, and treatment of cancer.”*

**Julie Freischlag, MD, FACS, FRCSEd (Hon), DFSVS, MAMSE**

Chief Executive Officer and Chief Academic Officer, Atrium Health Wake Forest Baptist  
Chief Academic Officer and Executive Vice President, Advocate Health  
Executive Vice President for Health Affairs, Wake Forest University

## Atrium Health Wake Forest Baptist Comprehensive Cancer Center 2023 Quick Facts

### Catchment Area

**30** Counties

**43%** of counties that are rural

**4,800,000** Residents

**15,266** Annual cancer cases

### Physical Space (square feet)

**1,217,221** Clinical

**302,183** Research

**103,987** Administrative

**1,623,391** Total

*“With the opening of a Wake Forest University School of Medicine campus in Charlotte on track, Atrium Health Levine Cancer is poised to leverage the medical school, which also serves as the academic core of Advocate Health, as never before. Increased collaboration between these organizations will revolutionize the landscape of cancer care, research, and education. Patients stand to benefit immensely from the innovative treatments, state-of-the-art facilities, and compassionate care that this new chapter in our journey will bring.”*

**L. Ebony Boulware, MD, MPH**

Dean, Wake Forest University School of Medicine

Chief Science Officer and Vice Chief Academic Officer, Advocate Health

### 2023 Research Funding (Grants & Contracts)

**\$20.3M** NCI funding

**\$33.8M** Peer-reviewed  
funding

**\$2.8M** Total non-peer funding

**\$36.6M** Total Funding





## Research

**600+** Clinicians and researchers

**180** CCC scientific members

**141** CCC affiliate members

**35%** of CCC members are women

**12%** of CCC members are women and URM

**180** High impact publications

**1** NCORP Research Base

**9** Shared resource labs

*“Atrium Health Levine Cancer, our cancer program in the Carolinas, is spearheading a decentralized model of specialty care that will help us improve cancer health by placing providers, clinical trials and other resources closer to the patients and communities we serve. We hope to scale this across all our service lines, particularly in our rural communities, where cancer diagnosis and comorbidity are often higher. This spirit of collaborative innovation can also be leveraged and applied to the success of Wake Forest University School of Medicine in Charlotte, housed at The Pearl Innovation District, where we are educating and training the next generation of cancer specialists.”*

**Ken Haynes, MSHA, MBA, FACHE**

President, Advocate Health – Southeast Region



# Extending our impact in the Carolinas

Atrium Health integration enables focus on a large, diverse population at higher risk of cancer

*“These are the communities where we can partner to make a real difference on the cancer burden through education, cancer screenings, care access and other activities. And we think we can apply what we learn in our communities to help reduce the cancer burden across the Southeast and, ultimately, the country.”*



Kathryn Weaver, PhD

As part of its strategic combination, Atrium Health Wake Forest Baptist Comprehensive Cancer Center is focusing on a larger and more diverse population at higher risk of cancer and health disparities.

The new catchment area, which we adopted in 2023, spans 30 counties in North Carolina and South Carolina. Thanks to the addition the Greater Charlotte area, our catchment area now has a population of 4.8 million, or 700,000 more people.

The new boundaries increased the proportion of Black/African Americans and Hispanics to 21% and 10% of the population we serve, up from 14% and 7% respectively. The proportion of Black/African Americans, rural residents, smokers, people who are obese, and rates of cancer diagnoses and mortality are all significantly higher than the national average.

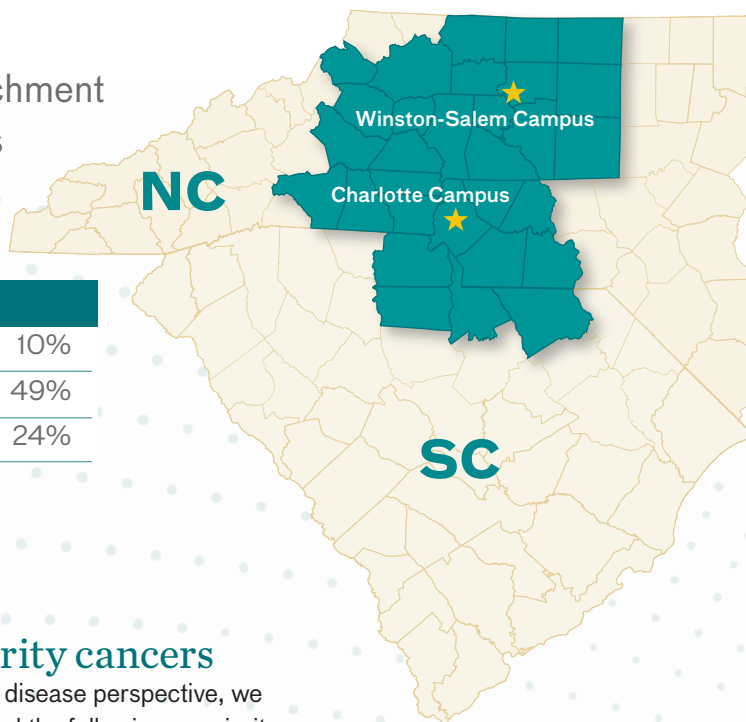
“Through deep understanding of the communities we serve, we can identify priority topics and areas to focus our efforts,” said Kate Weaver, interim associate director of community outreach and engagement (COE) for Atrium Health Wake Forest Baptist Comprehensive Cancer Center (CCC). “These are the communities where we can partner to make a real difference on the cancer burden through education, cancer screenings, care access and other activities. And we think we can apply what we learn in our communities to help reduce the cancer burden across the Southeast and, ultimately, the country.”

The new catchment area was created following an extensive analysis of COE activities undertaken by both the CCC and Atrium Health prior to the integration. Our unified COE team considered where both organizations’ patients lived, as well as where each conducted clinical trials, research, training and outreach activities. Input from researchers, clinicians, educators and community colleagues was critical, as was consideration of cultural ties. A 14-member community advisory board (CAB) and the CCC’s external advisory board then reviewed and endorsed the proposed new catchment area. The CAB and its subcommittees, the rural advisory council and minority advisory council, were then expanded to represent our expanded footprint.

**4.8** million total residents  
**30** counties  
**43%** rural  
**26,353** annual cancer cases  
**8,962** annual cancer deaths  
**3,576** Recipients of free cancer screening



**Two campuses, one mission** The new catchment area of the Comprehensive Cancer Center spans 30 counties and is anchored by two campuses.



POPULATION			
White	63%	Hispanic/Latinx/Latine	10%
Black/African American	21%	Female	49%
American Indian	<1%	Rural	24%
Asian	3%		

## Priority populations

With input from all these stakeholders, we identified the following priority populations within the new catchment area.

- Rural
- Black
- Hispanic
- Native American
- Adolescent and Young Adult (AYA)

The last two priorities were elevated to address lingering health disparities. Many Native American communities have limited access to cancer screening for early detection, and survivorship rates for AYA cancer patients continue to lag those of children and older adults with cancer.

To integrate input from these communities into research, education and clinical operations across the unified cancer program, we began implementing a strategic plan that calls for the following.

- Rolling out a new data visualization tool to help our researchers and community partners align their work with the cancer needs in our catchment area.
- Partnering with our Cancer Research Training and Education Coordination (CRTEC) team, historically Black colleges and universities and other community partners to foster a research workforce that reflects the diversity of the catchment area.
- Conducting a comprehensive catchment area needs assessment with our community partners to help ensure we capture the unique needs expressed by the populations and communities in the catchment area.

## Priority cancers

From a disease perspective, we identified the following as priority cancers within our new catchment area:

- Tobacco-related cancers
  - > Lung
  - > Head and Neck
  - > Bladder
- Breast
- Liver

We will continue our efforts to deliver broad cancer education, promote early detection, and provide cutting edge care for all cancers, but our priorities help educate our communities, clinicians, and researchers about cancers that may be more common in our region compared to national averages. Given the burden of tobacco-related cancers, we continue to focus on increasing participation in smoking cessation programs, clinical trials, and early screening to catch lung cancer at an early and potentially curable stage.

“We have a lot to do on lung cancer screening to make progress towards the 70 to 80 percent uptake rates for breast cancer screening,” Weaver said. “Patients may be less familiar with this newer screening test and both patients and their primary care providers may not know that they qualify for screening. With the addition of the robust early screening programs at Atrium Health, including their nationally recognized lung bus, the Comprehensive Cancer Center is better equipped to help bring lung screening to people in need.”

Liver cancer is a growing concern due to an aging population, viral hepatitis, obesity, alcohol consumption and other factors. We are also continuing to prioritize cancers where we see large disparities in outcomes, including breast and prostate cancers, which are more aggressive and fatal among African Americans.

# Building the case for patient navigation

From improving adherence to diversifying clinical trials, our nurse and population health navigators are enhancing the patient experience

## Atrium Health Wake Forest Baptist Comprehensive Cancer Center 2023 Quick Facts

### Community Outreach & Engagement

**46,661** People reached

**35** Cancers detected from free screenings



Kris Blackley, RN, MSN, OCN

Even when you have health insurance, arranging to receive cancer care can be a challenge. So, imagine what it's like for someone living in a homeless shelter who can't speak due to recent surgery.

That's what the patient navigation team at Atrium Health Levine Cancer Institute in Concord, NC had to do in 2022 to help a woman diagnosed with larynx cancer.

"She had low health literacy, no medical supplies for her PEG tube or her tracheostomy and several other socioeconomic factors that prevented her from being compliant with her care," recalled Candace Bashaw, MSN, RN, OCN, a head-and-neck navigator based at the clinic in Concord, NC.

Using texting, Bashaw was able to relay information between the patient and her providers and help her get the medical supplies she needed. She collaborated with a social worker on her team to secure stable housing for the duration of the patient's radiation treatment.

"She has since completed her radiation and has now transitioned to a homeless shelter," said Bashaw. "She has made it to all of her follow up appointments and I have been successful in getting her established with other local providers, including a gynecologist and urologist to address other medical complaints she has. She has transportation through Medicaid, and I continue to assist her in getting her rides arranged."

The case illustrates just one of the ways nurse navigators reduce the burden of cancer and health disparities at Atrium Health Levine Cancer the cancer program created in 2023 when Wake Forest Baptist Comprehensive Cancer Center (CCC) and the Levine Cancer Institute unified their cancer programs.

"Winning the war against cancer at the population level requires expanding screening and improving compliance, particularly among patients facing socioeconomic barriers," said Kris Blackley, RN, MSN, OCN, director of patient navigation at Levine Cancer. "Our oncology nurse navigators are at the forefront of our efforts to expand access to early screening, improve compliance, diversify clinical trials and deliver excellent patient experiences and they are improving outcomes and lowering costs in the process."







## Documenting the benefits of robust patient navigation

researchers like Kathryn Weaver, PhD, meanwhile, have been at the forefront of validating those claims.

A professor of social sciences and health policy at the Wake Forest University School of Medicine, Weaver focuses her research on cancer survivorship, health equity and health care delivery. She is the cancer care delivery research lead at the Wake Forest NCI Community Oncology Research Program Research Base, which develops and leads cancer prevention and control clinical trials and cancer care delivery research protocols within a network of community oncology practices across the country. (See article, page 26)

She has led or co-authored studies demonstrating the prevalence and efficacy of patient navigation, including one published in the Journal of Education in 2022 that found patient navigation, “solely or in combination with education, is an effective strategy to increase screening for breast and cervical cancer, beyond educational outreach efforts alone, among un-/underserved, racially/ethnically diverse women in rural and border Texas counties.”

Meanwhile, oncologists at the Levine Cancer Institute (LCI) in Charlotte, were coming to similar conclusions in their own investigations.

A study presented at the annual meeting of the American Society of Preventative Oncology in 2016, found LCI patients who received navigation services after being diagnosed with their first primary cancer between January 2013 and November 2014 had shorter hospital stays and lower odds of being readmitted to an acute care facility than patients who had not.

A 2021 study led by oncologist Bei Hu, MD, found minorities being treated for aggressive large B-cell lymphomas (LBCLs) at a lymphoma specialty clinic operated by LCI relied on high-intensity interventions by nurse navigators at twice the rate of whites (42% to 21%), despite similar prognostic risks scores. More importantly, the authors concluded those interventions and equal access to care may have resulted in similar survival between whites and minorities.

“This is the first study to our knowledge that shows similar survival outcomes in whites and minorities with aggressive LBCL,” wrote the authors. “The availability of an active nurse

navigation program may have helped overcome socioeconomic barriers.”

Health population health navigators at the Comprehensive Center in Winston-Salem, meanwhile, are playing a key role in diversifying participation in clinical trials. The 600 patients who received navigation in this program, which included clinical trials education, were more likely to enroll on clinical trials compared to patients in the pre-navigation era. For example, 40% of those living in rural areas, 41% of Black/African American patients, and 33% of Hispanic navigated patients participated in research.

## Raising the bar

In 2023, nurse navigators at Levine Cancer continued to raise the bar by standardizing best practices. By summer they had updated the navigation acuity score they use to assess caseloads and determine when additional navigators are needed at specific locations.

“It removes some of the subjectivity of our earlier acuity grading system and ensures consistency,” explained Bashaw.

The team also introduced disease-site-specific pathways to standardize how nurse navigators identify barriers to care and expedite specialty appointments for patients with certain cancers.

“Our team recognized that some of the general navigators in our regional sites may not be as familiar with the specific needs of these patients because they just don’t see them as often,” said Bashaw, who helped develop pathways for lung, colorectal, pancreatic, esophageal, and cholangiocarcinoma cancers. Pathways for breast, colorectal, thoracic and bladder cancer are also now available.

By the end of 2023, nearly 50 nurse navigators were working at Levine Cancer, and we expect that number to grow now that the Center for Medicare & Medicaid Services (CMS) is reimbursing some of the costs of providing such services.

“The decision by CMS to begin paying for some patient navigation services starting January 1, 2024, represents hard-earned recognition of the significant contributions nurse navigators make every day,” said Blackley. “It will allow us to help many more patients, including those struggling to overcome health disparities impeding the fight against cancer in so many of the communities we serve.”

# First Lady Jill Biden Highlights Financial Support Program and Patient Navigators

In a visit with leaders, first lady of the United States Jill Biden underscored the importance of tackling financial toxicity in cancer care and the critical role of patient navigators



First Lady Jill Biden

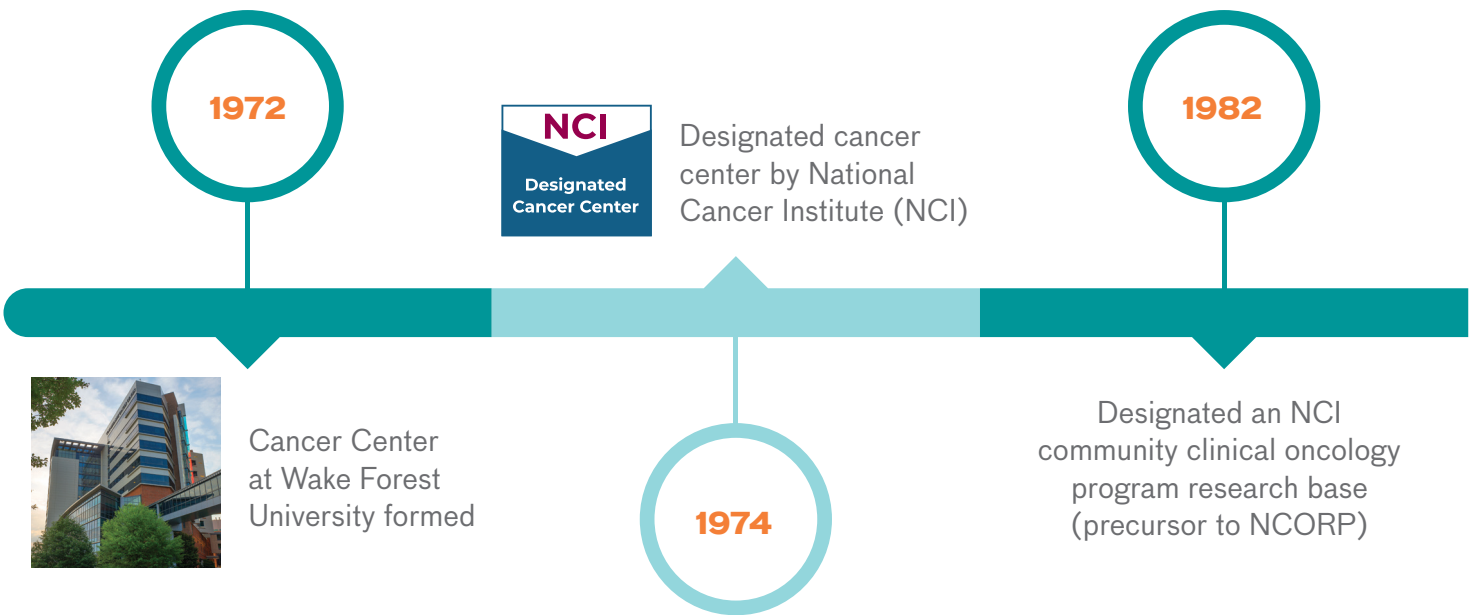
We welcomed first lady Jill Biden and NCI Director Kimryn Rathmell, MD to Atrium Health Levine Cancer to discuss Atrium Health Wake Forest Baptist Comprehensive Cancer Center’s initiative to ease the financial and psychosocial burdens cancer patients face.

Comprehensive Cancer Center Executive Director Ruben A. Mesa, M.D invited the first lady to visit after learning of her interest in our cancer patient navigation services Financial Toxicity Tumor Board (FTTB). Dr. Rathmell accompanied her in what became her first visit to an NCI-designated cancer center since being sworn in as the 17th director of NCI on Dec. 18, 2023.

The first lady has played a leading role since 2022 in reigniting the Cancer Moonshot launched by then Vice President Joe Biden in 2016. In addition to reducing the cancer death rate by half within 25 years, the initiative seeks to improve the lives of cancer patients and survivors through additional federal funding of cancer research.

During the February 9 event, teammates from the Comprehensive Cancer Center provided an overview of the FTTB, a multidisciplinary team consisting of physicians, nurses, financial counselors, nurse navigators, social workers, pharmacy personnel and administrators who help patients navigate complex financial difficulties related to cancer treatments. The first tumor board of its kind, the FTTB was created by Levine Cancer Institute in 2019 to address the rising cost of cancer care, particularly among patients who were living longer thanks to innovations such as targeted therapies, immunotherapy, and CAR T-cell therapy. “We understand the battle against cancer is fought on

## History of Atrium Health Wake Forest Baptist Comprehensive Cancer Center







**Left to right:** Ruben A. Mesa, MD; Jill Biden; W. Kimryn Rathmell, MD, PhD, NCI Director; Eugene Woods and Kris Blackley

multiple fronts,” Dr. Mesa explained. “It’s not just about the clinical fight, but also about ensuring our patients can access care without the added stress induced by financial toxicity.” With cancer patients nearly three times more likely to declare bankruptcy than those without cancer, addressing financial toxicity has emerged as a Cancer Moonshot priority.

“If they’re saying to you, you can try this medicine but it’s \$1,000 a week or a month, and it’s for your mom, who’s going to say, ‘I’m sorry mom we’re not going to buy that for you,’” Biden asked rhetorically during her visit. “It’s so important that we find a way to help patients afford their cancer treatments.”

The FTTB meets monthly to assist individual patients who face complex financial problems. Critically, it works in tandem with our Patient Assistance Program (PAP), designed to provide immediate assistance to patients in need. The key component of PAP is a team of pharmacy technicians dedicated to ensuring

that the correct drugs are authorized for each patient. This is crucial work since not getting the right prior authorization for the right drug could leave patients with bills in the tens of thousands of dollars. Moreover, by shifting this work to pharmacy technicians, nurses can focus on caring for their patients.

The initial design and outcomes of the FTTB were published in JCO Oncology Practice in 2021. In the two years since then, PAP has provided copay assistance to over 6,000 patients with a total dollar value of over \$6 million as well as provided free drugs to over 10,000 patients, saving patients greater than \$200 million.

“The tumor board you all have done is really a hallmark in the field for managing the very complicated parts of paying for health care,” Dr. Rathmell said. She added that NCI launched initiatives to accelerate colorectal screening and follow-up visits and fund financial toxicity research thanks in part to the Comprehensive Cancer Center’s pioneering research in both areas.

## Mutual thanks for improving access to patient navigation

Kris Blackley, RN, director of patient navigation for Levine Cancer Institute Department of Supportive Oncology, thanked the first lady for White House support in securing Center for Medicare & Medicaid Services (CMS) reimbursements for some cancer navigation services starting in January 2024.

*continued on page 16*



Designated comprehensive cancer center by NCI

2003



**Atrium Health**

Strategic partnership with Atrium Health announced

1990



Established joint School of Biomedical Engineering with Virginia Tech

2020

...Jill Biden Visits, *continued*

Through their research, Blackley and her co-investigators have shown patient navigation can improve cancer patient outcomes and reduce health care costs by reducing how often they visit the Emergency Department, are readmitted to the hospital or miss appointments.

"We have 65 navigators right now and last year we navigated over 10,000 new patients," Blackley told the first lady. "It's been so robust because our leadership here understands the value. This is a benefit that we provide our patients free of charge so, as you know, that is difficult to sustain over a long time, especially as we grow. So, that's why I am so grateful for everything you've done and for the Moonshot."

The first lady later thanked Blackley by inviting her to join her at the U.S. Capitol for President Biden's State of the Union Address on March 7, 2024. Typically, such invitations are made to individuals who embody the people and causes an administration is trying to help with its policy initiatives.

"As long as I've been in this position this is what we've have been working for," said Blackley, "to get patient navigation recognized for how it can improve care for all of our patients."

# Introducing Atrium Health Levine Cancer

Atrium Health unites cancer services at Atrium Health Levine Cancer Institute and Atrium Health Wake Forest Baptist under one name to elevate care and honor longtime benefactors

In recognition of its largest benefactor, Atrium Health aligned all its cancer services in the Carolinas under a single name in June 2023: Atrium Health Levine Cancer.

Levine Cancer unites the cancer services at Charlotte-based Atrium Health Levine Cancer Institute and Winston-Salem-based Atrium Health Wake Forest Baptist under one name to create the largest cancer program in the Carolinas, and one of the largest in the Southeast.

Levine Cancer's more than 440 providers and 3,000 other teammates care for more than 35,000 new cancer patients a year through a network of more than 25 locations that is anchored by our campuses in Winston-Salem and Charlotte. It is fueled by the research and innovation of the Atrium Health Wake Forest Baptist Comprehensive Cancer Center, and supported by Wake Forest University School of Medicine, the academic core of Advocate Health.







## Honoring the Levines

The name honors Leon and Sandra Levine and the Leon Levine Foundation, through which the couple have donated more than \$80 million to Atrium Health Levine Cancer.

“Together, our team at Atrium Health Levine Cancer will prevent, detect, treat and help more patients survive cancer,” said Ruben A. Mesa, MD, president of Levine Cancer and executive director of Atrium Health Wake Forest Baptist’s Comprehensive Cancer Center. “We will make life-saving research discoveries and reduce health disparities in the Carolinas and across the country.”

“When we made our gift to support the first Levine Cancer Institute facility, which opened in 2012, our vision was to help change the course of cancer care in the Carolinas,” said Sandra Levine. “We felt strongly that everyone should have access to the most current treatment options, close to home. Now, after a decade, we have witnessed tremendous progress as Atrium Health consistently pursues and achieves excellence in cancer research and patient care.”

Leon Levine was the founder and chairman of Family Dollar. He passed away in April 2023, leaving a tremendous legacy in the Carolinas, particularly in health care.

“The Leon Levine Foundation has been instrumental in the advancement of care for so many North Carolinians – no matter their race, ethnicity or background,” said Ken Haynes, president of the Southeast region of Advocate Health, of which Atrium Health is a part. “Atrium Health Levine Cancer has and forever will be synonymous with world-class care.” Levine Cancer catchment area encompasses approximately 4.8 million people living in 30 counties stretching from North Carolina’s border with Virginia to the northernmost counties of South Carolina.

“We are deeply grateful for Sandra and Leon Levine’s leadership and their confidence in our mission to provide the best and most equitable health care experience for our patients,” said Dr. Mesa. “They inspire others in the communities we serve to support our vision and are making a lasting impact to improve lives for generations to come.”



### Atrium Health

#### Levine Cancer

Atrium Health Levine Cancer program launched

2023

Submit competing submission to NCI

June  
2023

New cancer cases **15,266**  
Total funding (direct) **\$33.8M**  
Physical space **1,624,391 sq ft**  
Clinical trial accruals **47,877**  
Scientific membership **174**

2026

# Assessing How Vaping Nicotine Affects Teen Health and Well-being

Atrium Health Wake Forest Baptist Comprehensive Cancer Center expertise helps researchers land NCI POI grant

*“We have spent many hours learning from each other and reflecting on the potential impact of vaping and gaps in the research.”* Eric Donny, PhD



Researchers Eric Donny and Erin Sutfin had each been investigating distinct aspects of tobacco-related disease for a decade before they began collaborating in 2015.

That’s when Donny, who has researched the pharmacology of nicotine dependence and the health consequences of tobacco use since the late 1990s, joined Sutfin on the faculty at the Wake Forest University School of Medicine. A professor of social sciences and health policy, Sutfin has researched how adolescents and young adults use tobacco products since 2006.

“Since then, we have spent many hours learning from each other and reflecting on the potential impact of vaping and gaps in the research,” said Donny, a professor in the Department of Translational Neuroscience, who co-leads the Cancer Prevention and Control Program at the Atrium Health Wake Forest Baptist Comprehensive Cancer Center. “We still don’t know how these products drive dependence and whether their use impairs wellbeing, disrupts neurological development, or limits respiratory function in teens. Also, the landscape has changed since 2019 due to the rapid adoption of new vaping products and students returning to the classroom after the pandemic.”

To fill that gap, Sutfin and Donny designed Project MARVEL (Multidisciplinary Assessment of Risks from Vaping during Early Life), an ambitious study with two overarching aims:

- To assess the use of nicotine-containing vaping products among adolescents and how use relates to the emergence of symptoms of dependence
- To determine how vaping affects adolescent health and well-being through its impact on key physiological and psychological systems that are still developing during adolescence

The National Cancer Institute (NCI) rewarded their efforts in May 2023 with a prestigious research program project (PO1) grant worth \$9.4 million.



Eric Donny, PhD



Erin Sutfin, PhD



## Leveraging expertise in cancer genomics, biostatistics, and qualitative research

To win a PO1 grant, applicants must convince NCI they have the expertise and resources to manage at least three interrelated research projects, each led by an independent investigator and each capable of standing on its own scientific merit. NCI began encouraging such multidisciplinary studies a decade ago after deciding they could answer critical questions about complex problems quicker than narrower research projects undertaken by investigators with specific interests and competencies.

Project MARVEL will draw not just on its investigators' expertise, but engage shared resources provided by the Comprehensive Cancer Center. These include cancer genomics and biostatistics expertise and services needed to determine whether, and how, vaping nicotine products triggers epigenetic changes in adolescents that can disrupt neurological development and respiratory function.

"Bronchoscopies in small samples of adult vapers suggest alterations in biologic pathways that overlap with cigarette smoking and increase the risk for airway disease, but this work has not been extended to adolescents," notes Donny. "We will sample nasal epithelial cells and use other non-invasive methods in the lab to address this gap."

The project is also supported by the Comprehensive Cancer Center's Qualitative and Patient Reported Outcomes (Q-PRO) shared resource, led by director Sutfin. Q-PRO experts are helping investigators understand how teens experience the impact of vaping in their own words, emphasizing how use of vaping products and their potential impact on health might directly affect the lived experience of high school students.

*"We need to know what the health harms are before we can communicate them to teens."* Erin Sutfin, PhD

## Informing teens about the harms of vaping

Project MARVEL also includes an adolescent research support team. The team has helped set up "research infrastructure," including advisory committees of students, administrators, teachers and parents whose support is critical to the success of the project.

"The complexities of conducting adolescent research on vaping are substantial," Sutfin explained. "They include legal and practical hurdles to recruiting minors, phrasing medical questions in terms high schoolers understand and ensuring they respond truthfully. The team must have resources to recruit and enroll students and make sure they participate in follow-up surveys and show up for lab appointments. We also need to ensure students who report emotional or behavioral concerns receive timely follow-up care."

Data from the first round of student surveys will provide valuable insight into how returning to school after the pandemic affected teen vaping behaviors as early as Spring 2024.

"The pandemic reduced access to vaping products but now that kids are back in school, we are anticipating higher rates of vaping" Sutfin said. "Survey results will provide important data on how many kids vape, what they vape and how frequently they vape. That, in and of itself, will be useful."

"Longer term, we hope to use our lab findings to communicate to teenagers what the harms of vaping are," said Sutfin. "They understand the dangers of cigarette smoking loud and clear, but they think vaping is safe. We need to know what the health harms are before we can communicate them to teens."

Donny and Sutfin hope the study will also shed light on the extent to which vaping is associated with adolescents' use of other tobacco products known to cause cancer.

Research Sutfin conducted in 2016 showed that over half of adolescent and young adult e-cigarette users reported using multiple tobacco products, with dual use of e-cigarettes and cigarettes being the most common combination.

That means pinning down the relationship between vaping nicotine products and emerging signs of dependence could be critical to the fight against cancer.

"People who vape could end up smoking or using both products," Donny explained "While teen smoking is at historic lows, we need to be mindful of any changes that could drive the use of, and addiction to, harmful products in youth."

# NCI Grant Spurs Major Step in Health Disparities Research

Researchers explore novel therapeutics to increase equity for Black/African American NSCLC patients



Wei Zhang, PhD

*“We are in a unique position to investigate the molecular events that lead to differences in ICB responses by Black lung cancer patients and to develop effective therapeutic strategies to overcome health disparities.”*

In a major step forward for its health disparities research, Atrium Health Wake Forest Baptist Comprehensive Cancer Center has begun a five-year study focused on developing novel treatments that target genetic, immunologic and metabolic changes that disproportionately affect Black/African Americans with non-small cell lung cancer (NSCLC).

The study, which is being financed by a \$2.7 million NCI grant awarded in April 2023, is paving the way to extend the cancer center's health disparities research to leukemia and colorectal cancer.

“This RO1 lung cancer research project represents a major step in our health disparities research,” said Wei Zhang, PhD, principal investigator for the study and director of the Center for Cancer Genomics and Precision Oncology at the cancer center. “The technology and approach we have used have already helped the cancer center compete for funding of an R21 project on cancer health disparities in leukemia directed by Tim Pardee, MD. It's also provided a track record in funded health disparities research that is required for a new submission of an RO1 Supplement, directed by William Gmeiner, PhD, focusing on colorectal cancer.”

## Finding Targeted Therapies to Enhance ICB Drugs

Lung cancer is the most frequent cancer diagnosis at the Comprehensive Cancer Center and epidemiologic data collected by our Office of Cancer Health Equity show that Black patients in our region have lung cancer incidence and mortality rates 15% higher than rates among Black patients in the U.S. Furthermore, integration with Atrium Health has increased the Black population from 14% to 21% of our service area. Previous research at the cancer center has shown that the tumor tissues of Black patients previously untreated for NSCLC contain more “tired” and less robust immune T cells and altered redox—the reaction that occurs when sugar and fat are broken down in the body—and fatty acid metabolism. These molecular events make it less likely to kill cancer cells than for white patients by conventional therapeutic approaches.

Recent studies have also shown that Black patients with NSCLC respond better than white patients to certain immune checkpoint blockade (ICB) drugs that allow T cells to better kill cancer cells, although resistance to these drugs can occur over time.



Zhang's team believes that the effectiveness of these drugs can be increased by combining them with other targeted therapies. Specifically, they propose that the unique features of redox and lipid metabolism that give rise to dysfunctional immune cell ecosystems underlying health disparities for Black NSCLC patients can be exploited by innovative redox and lipid metabolism-targeting therapeutics to further improve response to ICB.

"We are in a unique position to investigate the molecular events that lead to differences in ICB responses by Black lung cancer patients and to develop effective therapeutic strategies to overcome health disparities," said Zhang.

## A guide for future studies and clinical trials

This study is being co-directed by Cristina Furdui, PhD, professor of molecular medicine and co-director of Wake Forest University School of Medicine's Center for Redox Biology and Medicine, and Liang Liu, PhD, assistant professor of cancer biology. Since winning the grant the team has assembled a team of bioinformatics researchers including bioengineering graduate student Seha Ay and secured a supplemental RO1 grant of more than \$300,000 to address data bias. Those funds will allow Ay and a student intern to participate in the cancer center's lung research program.

The team has also begun collaborating with lung cancer specialists at the Atrium Health Levine Cancer Institute to acquire samples from Black patients in the Charlotte region.

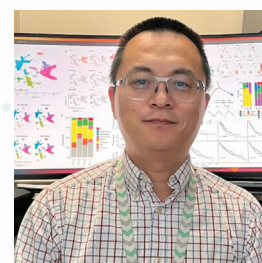
"We have resolved issues related to protocols and are hopeful samples will start flowing from Levine Cancer for this project in 2024," Zhang said.

Zhang's research team will use the grant to produce high-resolution tumor profiles using sample acquired from Black patients, develop supporting data to link genomics to metabolism and generate pre-clinical data to show how certain inhibitors can reshape the tumor environment and improve ICB response.

"As an example, we will use NSCLC patient-derived organoids and cell lines in humanized mouse models to determine whether MCL1 inhibitors (AZD5991 or VU661013) and Devimistat (CPI-613) can reprogram the tumor microenvironment and improve response to ICB," Zhang explained. "Results will help guide future studies and potential clinical trials to help reduce cancer disparities and to achieve treatment equity."



Cristina Furdui, PhD



Liang Liu, PhD

# Pushing the Frontiers of Radiation Therapy

New Proton & Advanced Radiation Center (PARC) enhances radioligand and neuro oncology programs



Ruben A. Mesa, MD, executive director of Atrium Health Wake Forest Baptist Comprehensive Cancer Center, addresses guests touring newly installed cyclotron

The opening of a new advanced radiation center in Charlotte, North Carolina is elevating Atrium Health Levine Cancer's role as a leading center for brain cancer and radiopharmaceutical research.

Patients began receiving Gamma Knife and radioligand therapy at the \$71 million Atrium Health Levine Cancer Proton and Advanced Radiation Center (PARC) in January 2024. The radioligand treatment area is outfitted to deliver radiopharmaceuticals in an efficient and patient-centric way thanks to input from clinicians who were the first in the Greater Charlotte market to offer Lu-177 dotatate treatment for gastroenteropancreatic neuroendocrine tumors and Lu-PSMA therapy for late-stage prostate cancer.

PARC also houses the Atrium Health Levine Cancer's second Gamma Knife center. Our Gamma Knife center in Winston-Salem, which opened in 1999, remains among the most active in the nation.

When PARC begins offering proton therapy in fall 2024, it will become the only proton beam therapy site operating between Washington, D.C. and Atlanta.

## Expanding our leadership in neuro oncology and brain tumor research

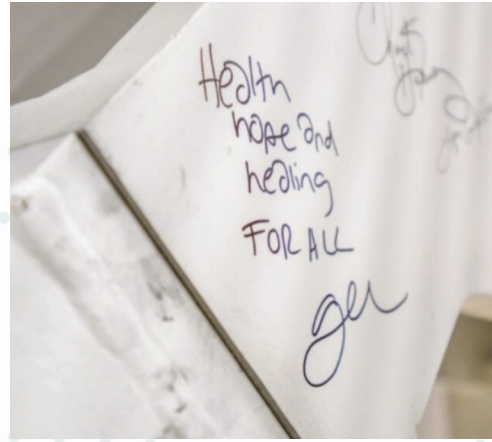
In addition to expanding access to less expensive and invasive therapies for some of our catchment area's hardest-to-treat cancers, PARC will enhance our neuro oncology program and nationally recognized Brain Tumor Center of Excellence (BTCOE).

Under the leadership of BTCOE Director Dr. Waldemar Debinski, the Comprehensive Cancer Center has been granted more than \$40 million for neuro oncology research since 2004. Historically, its research has focused on better managing patients with primary brain tumors, especially glioblastomas (GBM), and metastases to the brain. Both populations suffer high incidence and mortality rates in our catchment area.

"Our Gamma Knife programs in Charlotte and Winston-Salem continually find new ways to collaborate through joint research efforts and sharing of expertise in tumor boards," said Stuart H. Burri, MD, lead radiation oncologist over the Gamma Knife program at Atrium Health Levine Cancer Institute in Charlotte. "We have joint research review processes and tumor boards to allow sharing of expertise and trials across the campuses."

PARC is already enabling important research collaboration with neuroscientists, such as Anthony Asher, MD, president of Atrium Health





Advocate Health CEO Gene Woods signs cyclotron during installation ceremony

Neurosciences Institute and surgical director of neuro oncology at Atrium Health Levine Cancer. Dr. Asher and Dr. Burri are co-principal investigators on a national cooperative group clinical trial that will advance the use of Gamma Knife radiosurgery.

PARC's opening comes as the Wake Forest NCORP Research Base kicks off a five-year Phase III trial to ascertain whether more treatments with lower doses of radiation, or fractionated SRS, result in fewer adverse effects than higher-dose single fraction stereotactic surgery (SRS) therapy. That study will focus on patients with breast, kidney, non-small cell lung cancer or melanoma who have received or will receive immune checkpoint inhibitor therapy for metastasis to the brain within 30 days of being treated with SRS.

## Training a new generation of cancer researchers

PARC will help keep the Comprehensive Cancer Center at the forefront of infusional radiopharmaceuticals, an area of research NCI prioritized in 2019 with the launch of its Radiopharmaceutical Development Initiative (RDI).

"Since the launch of our radioligand therapy program in 2017, we've become the highest volume program in the region – treating neuroendocrine and prostate cancers – and we've used that expertise to improve how we're administering this therapy and exploring other cancers that may benefit from this promising approach," said Ruben A. Mesa, MD, executive director of the Comprehensive Cancer Center.

*continued on page 24*



The Gamma Knife team at Atrium Health Levine Cancer Proton and Advanced Radiation Center. From left to right; David Piantino, MS, medical physicist; Stacey Scott, MSN, Gamma Knife coordinator; Sarah Bender, assistant vice president – administration operations; Amy Hicks, NDP, RN, Director of Nursing, Atrium Health Levine Cancer; Stuart Burri, MD, lead radiation oncologist over the Gamma Knife program; Anthony Asher, MD, neurosurgeon; Cameron Davis, program manager, Neurosciences Institute; Hongjun Zhang, medical physics and Chelsea Rowland, clinical nurse supervisor.









Atrium Health Levine Cancer Proton and Advanced Radiation Center (PARC) in Charlotte began providing Gamma Knife and radioligand therapy in January 2024

This will broaden the exposure of radiation oncology residents to novel radiation treatment techniques and may allow for expansion of the residency program as patient volumes grow.

In the meantime, the cancer center is searching for a new grant-funded tenure-track faculty researcher with experience in the field of radiomics and the skills and resources to build a new research program that would leverage the strengths and unique capabilities of PARC, the BTCOE and the Center for Precision Medicine at Wake Forest University School of Medicine.

“We are looking for someone who would have a keen eye towards cross-departmental collaboration with colleagues on both campuses,” said Carnell Hampton, PhD, assistant vice president for medical physics at Atrium Health. “With the PARC being less than a 10-minute walk from where the Charlotte campus of the Wake Forest University School of Medicine and the Pearl Innovation District are being built, the opportunities for collaboration with academicians and industry leaders are promising.”

Learn more about PARC's  
advanced therapies



## Patient Story: Patrice Bidgood

Patrice Bidgood (shown right) was 34 and concerned with a lump she discovered under her left arm a month after losing her mother to breast cancer when she sought care at Atrium Health Levine Cancer in Charlotte, North Carolina.

Because she was uninsured, Patrice's care team connected her to Levine Cancer's Project PINK, which allows eligible women a free screening mammogram and follow-up care (diagnostic screening, ultrasound and biopsy) if recommended. Project PINK covered the costs for Patrice's mammogram, biopsy and genetic testing, which found she had a PALB2 gene mutation, which can increase a woman's breast cancer risk.

After further testing, she was diagnosed with stage 1 breast cancer. Her doctor recommended a lumpectomy, followed by chemotherapy and radiation.

Six years later, at age 40, Patrice is in remission and her medical team is gradually reducing the doses of her monthly injection and daily chemo pill. With support from family, friends and Levine Cancer, she is doing what she can to raise awareness of breast cancer.

In October 2023, she participated in Paint the Wall Pink and NASCAR Drive for the Cure 250 at the Concord Motor Speedway with other Levine Cancer patients.

“I was super excited to meet new faces and be around people who support women with breast cancer,” said Patrice, who received diagnostic screening, ultrasound and biopsy for free because she qualified for Project PINK program.

*“After seeing what my mom went through, I told myself I have to share my story for her, my family and other women just like me.”*

# Accelerating Translational Research

Wake Forest NCI Community Oncology Research Base helps train the next generation of cancer researchers, accelerate accruals and improve patient outcomes



Glenn Lesser, MD



Kathryn Weaver, PhD

The Wake Forest NCI Community Oncology Research Program Research Base continues to play a vital role in translational research by testing cancer care delivery and control research in community oncology practices nationwide.

Atrium Health Wake Forest Baptist Comprehensive Cancer Center is home to one of just seven research bases for the NCI Community Oncology Research Program (NCORP) and the only one based at an NCI-designated Comprehensive Cancer Center. Its current 6-year, \$25 million NCI grant was awarded in 2019 and can be renewed only through a highly competitive renewal process.

The research base specializes in discovering strategies that improve the effectiveness and implementation of best practices across the continuum of care. It does this by providing community-based practitioners the opportunity to participate in NCI-supported cancer control and cancer care delivery trials designed to improve health behaviors, enhance quality of life, reduce symptom burden for survivors and advance cancer care delivery.

“When we design something – a study, an intervention, an approach for oncology care delivery – we include the providers from those diverse community settings and get input from them all along the way,” said Kathryn Weaver, PhD, co-principal investigator and cancer care delivery research lead for the Wake Forest NCORP Research Base. “The result is, hopefully, that we come up with good solutions that can be rapidly taken and used in actual practice and made broadly available.”

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*“The beauty of the NCORP model is that when you ask a question, not only do you get the answer to that question, but you get to ask many, many more questions from the information you collect. That can be very powerful, particularly when you consider the potential we now have to partner with clinical investigators across Advocate Health.”*

Glenn Lesser, MD





## Enhancing cancer research and training

By providing access to a larger and more diverse patient population treated in a variety of health care delivery settings, the research base accelerates accrual to cancer clinical trials and other human-subjects research. This advances our translational research capabilities by increasing the generalizability and relevance of researchers' findings.

"NCORP supplements what investigators at the Comprehensive Cancer Center and Wake Forest University School of Medicine do, which is to work primarily in our catchment area," explained Glenn J. Lesser, MD, Wake Forest NCORP Research Base's other co-principal. "Their studies generate pilot data which must be tested with a larger cohort. The Wake Forest NCORP Research Base provides them a way to test their ideas and translational research in the real world."

Dr. Lesser estimates that the research base contributes to the support of 30 research positions across the Comprehensive Cancer Center at any given moment.

"If we can run trials and identify things that work (or don't) in the community setting, the translation is pretty straightforward," noted Dr. Lesser. "It can be generalized, and relatively quickly, to affect the experience of cancer patients throughout the country."

## Advancing scholarship

Since 2019, the research base has had an average of eight studies running at any given time, with a maximum of 11 simultaneous studies. In 2022 and 2023, it completed three studies and published 13 manuscripts, many in higher

impact journals, such as Journal of Clinical Oncology, Journal of the National Cancer Institute, The American Journal of Cardiology, CHEST Journal and NEJM Evidence. Examples include: **Preventing Anthracycline Cardiovascular Toxicity with Statins (WF-98213 – PREVENT)**: The purpose of this study was to see if patients who are treated with an anthracycline based chemotherapy for breast cancer or lymphoma received protective benefits from taking a statin to prevent cardiotoxicities. It found that prospective statin administration did not affect left ventricle ejection fraction declines two years post anthracycline administration. An article about the study entitled "Statins and Left Ventricular Ejection Fraction Following Doxorubicin Treatment" was published August 18, 2022, in NEJM – Evidence.

**Implementation of Smoking Cessation Services (WF-20817CD – OaSiS)**: This study sought to help lung cancer screening clinics do a better job of supporting patients who want to quit smoking by determining the best ways to deliver smoking cessation services during screening. Results, which revealed that participants showed a significant reduction in tobacco use over time, were published in the CHEST Journal in August 2023 under the title "The Optimizing Lung Screening Trial".

## On the Horizon

Now that the Comprehensive Cancer Center is part of Atrium Health and Advocate Health, the Wake Forest NCORP research base has more opportunities to form investigative partnerships.

"We're beginning to collaborate with investigators at Levine Cancer Institute and wrapping them into several of our studies and trying to expand that interaction," said Dr. Lesser, who was appointed deputy director of the Comprehensive Cancer Center in late 2023. "And there's at least one NCORP community site within the Advocate Health network, the Aurora NCORP - with locations in Wisconsin and Illinois - that we've worked with for many years."

Meanwhile, the Wake Forest NCORP Research Base is pushing forward with new studies, including investigating how to improve the delivery of radiation therapy for brain metastasis, so patients don't experience severe side effects that affect cognition.

# Sharing Knowledge, Driving Discovery

## Atrium Health Levine Cancer researchers share more than 175 research presentations at two major conferences

Atrium Health Wake Forest Baptist Comprehensive Cancer Center underscored its commitment to advancing cancer care worldwide by sharing its knowledge and driving meaningful discussions at two of the nation's most important conferences in 2023.

Our researchers, including those at Atrium Health Levine Cancer Institute, made more than 175 presentations at the 2023 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago in June and the 2023 ASH Annual Meeting and Exposition in San Diego in December.



At the 2023 ASH Annual Meeting and Exposition in San Diego, 40 of our teammates served as presenting authors, chairs or co-chairs for 112 oral presentations, including three symposia.



**Ruben A. Mesa, MD, FACP**, chaired “Satellite Symposia: Case Challenges in Myelofibrosis for the Community Clinician.”



**Timoth Pardee, MD, PhD**, participated in “Symposia: Scientific Workshop on Mitochondria and Metabolism in Blood Cancer - From Worms to Patients Program: Scientific Workshops.”



**Payal Desai, MD**, chaired the scientific symposia “Understanding Sickle Cell Pathophysiology,” and co-chaired a special session entitled “Sickle Cell Disease Centers - Looking for Money in All the Right Places for Sickle Cell.”



# 2023 ASCO<sup>®</sup> ANNUAL MEETING

Dozens of teammates presented more than 65 posters, panel discussions and oral abstracts based on the work of nearly 600 authors and co-authors at the ASCO meeting, where four received special recognition for their role advancing cancer care globally. Those recipients and their awards were:



**Declan Walsh, MD, MSc, FACP, FRCP (Edin)**  
**Walther Cancer Foundation Endowed Supportive Oncology Award**

Dr. Walsh is the chair of the Department of Supportive Oncology and the Hemby Endowed Chair in Supportive Oncology at Levine Cancer Institute. Before joining Atrium Health, he founded the first U.S. hospital palliative care program at the Cleveland Clinic, which was designated as a World Health Organization international demonstration project and accredited by ESMO as an Integrated Center of Oncology and Palliative Care. By 2017, with support from Atrium Health Levine Cancer Institute, he created the first-ever department of supportive oncology that integrated services such as rehabilitation, nutrition, surgical oncology prehabilitation and survivorship. He also created an endowed chair and launched several fellowship programs. Under his leadership, Atrium Health Levine Cancer Institute became one of just five cancer institutes in the nation to be recognized by the European Society of Medical Oncology (ESMO) as a designated Center of Integrated Oncology and Palliative Care for the period 2023-2025. Dr. Walsh was named Cancer Supportive and Survivor Care Leader for Atrium Health Levine Cancer in November 2023.



**Ashley Sumrall, MD, FACP**  
**ASCO Advocate of the Year Award**

Dr. Sumrall serves as Section Chief of Neuro-Oncology at Atrium Health Levine Cancer and Clinical Associate Professor at Wake Forest University School of Medicine, Department of Internal Medicine, Section on Hematology and Oncology. Dr. Sumrall was recognized for painting a clear and concise picture for lawmakers and their staff on how current health policies not only impact oncology and cancer patients but the broader U.S. health care system as well. From sending ACT Network letters to her lawmakers, attending the Advocacy Summit, participating in federal agency meetings, engaging on social media, and contributing to the ASCO Association PAC, she made cancer care advocacy a priority in 2022. She currently serves on ASCO's Government Relations Committee.



**Antoinette R. Tan, MD, MHSc, FASCO**  
**2023 Fellow of the American Society of Clinical Oncology (FASCO)**

The FASCO distinction recognizes ASCO members for their extraordinary volunteer service, dedication, and commitment to ASCO.



**Arielle Heeke, MD**  
**2022 ASCO Advocacy Champion**  
**at Senator's Club Level**

# On the Shoulders of Giants

We would not be where we are today without the contributions of two of oncology's greatest leaders

As we celebrate all that we have accomplished in the last two years, we would be remiss not to honor two former leaders whose dedication and skills helped get us here.



William Blackstock, MD

*“His lifelong contributions to the care and treatment for patients laid the groundwork for our unified cancer program to continue to advance health equity and fight the disease that took him from us.”*

Ruben A. Mesa, MD

## In Memoriam: William Blackstock, MD

The cancer community lost one of its greatest warriors in 2023 with the passing of William Blackstock Jr., MD, who played a key role unifying the Wake Forest Baptist Comprehensive Cancer Center and Atrium Health Levine Cancer Institute (LCI).

Dr. Blackstock passed in February 2023 at age 60 after a lengthy battle with prostate cancer. Just two months earlier he had completed a two-year stint as interim director of the cancer center helping unify the two cancer programs.

During his 27-year career at the Comprehensive Cancer Center, Dr. Blackstock became a nationally recognized cancer researcher and one of the first African Americans in the country to chair a radiation oncology department. He was dedicated to improving the lives of people with cancer in North Carolina, his home state.

“William was passionate about tackling the cancer burden of a diverse and expanded catchment area through innovative, relevant cancer research, increasing access to high quality cancer care and clinical trials, trustworthy engagement and outreach, and meaningful pipeline programs that foster workforce diversity, equity, and inclusion,” said Ruben A. Mesa, MD, executive director of the Comprehensive Cancer Center. “His lifelong contributions to the care and treatment for patients laid the groundwork for our unified cancer program to continue to advance health equity and fight the disease that took him from us.”

Dr. Blackstock graduated from Wake Forest University and the Brody School of Medicine at East Carolina University before completing his residency as chief resident and a research fellowship at the University of North Carolina at Chapel Hill. He returned to Wake Forest in 1996 to join the school of





medicine faculty, became its chair of radiation oncology in 2008 and directed the institution's clinical research program from 2008 to 2020. From 2022 to 2023, he served as interim director of the Comprehensive Cancer Center.

Dr. Blackstock published more than 100 journal articles and book chapters on clinical radiation oncology, radiation therapy and cancer management. He was a national expert in the radiotherapeutic management of cancers, with a primary focus on gastrointestinal cancer treatment. His seminal work on esophageal cancer and the prognostic value of PET-based response changed the standard of care and how response is assessed in the disease.

He served on the NCI-designated Pancreatic Task Force and the Gastrointestinal Steering Committee for the crucial Cancer Centers Study Section (A), participated as a valued reviewer for many NCI cancer center site visits, and was deeply valued on many cancer center external advisory boards.

To elevate and amplify Blackstock's legacy, the Wake Forest University School of Medicine has launched an annual Blackstock Symposium, featuring renowned leaders in the areas of justice, equity, diversity, and inclusion.

"William was the essence of kindness, genuine humanity and professionalism," said Jenny Kim, MD, MBA, director of administration for the cancer center. "He will be deeply missed by our Atrium Health Wake Forest Baptist family and many others."

## Dr. Derek Raghavan

Atrium Health has permanently endowed a chair in cancer research and education in the name of Derek Raghavan, MD, to commemorate his contributions to making Atrium Health Levine Cancer into one of the strongest cancer programs in the country.

Dr. Raghavan was named president of LCI in 2011, when Atrium Health tasked him with creating a model of decentralized cancer care that could be expanded across the system to reach underserved populations. He retired in February 2023 after expanding LCI's network to include more than 150 providers at over 25 care locations.

Dr. Raghavan had a globe-spanning career in clinical research that included being principal investigator on more than a dozen major research projects, publishing more than 300 papers in peer-reviewed journals and editing nine textbooks. Prior to joining Atrium Health, he had served as chair of the Taussig Cancer Institute at the Cleveland Clinic, assistant director of the Norris Comprehensive Cancer Center and chair of medical oncology at the Roswell Park Comprehensive Cancer Center.

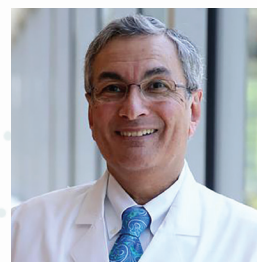
His contributions at LCI included securing a strong relationship with Leon and Sandra Levine, whose foundation has contributed more than \$80 million to Atrium Health. Atrium Health honored the family in 2023 by unifying the Wake Forest and LCI service lines under the name, "Atrium Health Levine Cancer."

During Dr. Raghavan's tenure, LCI achieved its initial accreditation from the Foundation for the Accreditation of Cellular Therapy, launched a community outreach program that provided free education and cancer screening to

more than 40,000 people, dispersed multi-disciplinary experts and clinical trials to regional sites, launched five oncology fellowships, and built robust patient navigation, supportive oncology and cancer rehabilitation programs that helped LCI earn the first Planetree certification for excellence in patient-centered care ever awarded to a cancer center.

Dr. Raghavan's legacy will live on through the establishment of the Dr. Derek Raghavan Endowed Chair in Cancer Research. Representing the highest level of distinction for a physician at Atrium Health, the endowed chair will provide a permanent funding source to ensure medical students, residents and fellows have the opportunity to work with and learn from the recipient.

"Derek reimagined the cancer care provided at Atrium Health and made it into a national model," said Gene Woods, chief executive officer of Advocate Health, of which Atrium Health is a part. "He had an unwavering focus on keeping the patient at the center of everything we do."



Derek Raghavan, MD

***"Derek reimagined the cancer care provided at Atrium Health and made it into a national model."*** Gene Woods, chief executive officer of Advocate Health

# Putting the Community at the Heart of All We Do

## Revamped community advisory board ensures alignment with more diverse catchment areas

Atrium Health Wake Forest Baptist Comprehensive Cancer Center has revamped its Community Advisory Board to ensure community voices from across its new and more populated, urban and diverse catchment are heard at the highest levels of leadership.

In May 2023, the Comprehensive Cancer Center's 14-member Community Advisory Board (CAB) was updated to reflect our new geographic footprint.



Lavondia Alexander,  
RN, MSN, MBA



Jane Smart, BSN, MBA

"Our CAB members are partners committed to cancer equity and work together with the cancer center to ensure our clinical care, research, and outreach activities are guided by community insights and priorities," said Nadine Barrett, PhD, associate director, Community Outreach and Engagement for the Comprehensive Cancer Center and chief community engagement officer for the Atrium Health Levine Cancer service line. "It helps ensure bidirectional communication, which is critical to reducing the burden of cancer for all the communities we serve."

The CAB includes providers, survivors, trained caregivers, faith leaders and leaders from community-based organizations and academic institutions. It is led by co-chairs Jane Smart, RN, associate director for Cancer Center Partnerships with the American Cancer Society and Lavondia Alexander, RN, MSN, MBA, who joined the board from our Minorities Cancer Advisory Council in May. Alexander serves as chief quality officer for Kintegra Health based in Gastonia, North Carolina, while Smart lives and works in the Greensboro-Winston-Salem-High Point area.

To further enhance bi-directional communication and ensure diverse insights and expertise shape our collective work, the Comprehensive Cancer Center's 12-member Rural Advisory Council and 16-member Minority Cancer Advisory Council now operate as subgroups of the CAB. Together the CAB and councils draw members from 17 of the 30 counties in our catchment area. More than a third of their members, or 36%, represent traditionally underserved racial and ethnic communities. This helps ensure these voices are heard and lead to action.

In 2023 the CAB advised multiple researchers on how to communicate their work in a way that builds trust and promotes equitable partnerships with the communities we serve.

In 2024, the CAB, councils and our network of community partners will work together with the Comprehensive Cancer Center to implement a robust community assessment that will identify community priorities, needs and strengths. Using this information, we will develop and implement a community-centered outreach and engagement strategy to address the cancer burden in the region.







# Building Momentum

## Expansion and new leadership mark an eventful year for community outreach and engagement

Atrium Health Wake Forest Baptist Comprehensive Cancer Center more than doubled the number of people it reached through its community outreach and engagement efforts in 2023 and ended the year with a new leader.



Nadine Barrett, PhD, MA, MS

*“Our CAB members are partners committed to cancer equity and work together with the cancer center to ensure our clinical care, research, and outreach activities are guided by community insights and priorities.”*

Nadine J. Barrett, PhD, MA, MS was named as associate director of community outreach and engagement (COE) for the cancer center as part of her broader responsibilities advancing health equity at Atrium Health Wake Forest University School of Medicine (WFUSOM) and Atrium Health. As the school's senior associate dean for community engagement and equity in research, she will provide strategic and thought leadership to bolster community engagement activities and equity strategies for WFUSOM clinical trials initiatives. She will also serve as the chief community engagement officer for the Atrium Health Levine Cancer service line.

Barrett comes from Duke University, where she served as founding director of both the Duke Center for Equity in Research and the nationally awarded Duke Cancer Institute's office of health equity, where she had led community engagement strategy and advancing equity in research since 2012. She is the inventor of “Just ASK,” a nationally recognized and endorsed education and training program designed to address the lack of diverse and broad representation in clinical research and participation in trials across the translational spectrum.

In 2023, the Atrium Health Wake Forest Baptist Comprehensive Cancer Center (WFBCCC) provided free education on cancer prevention, screening and survivorship to 46,611 people, up more than two-fold from the previous year. The dramatic increase was due, in part, to the integration with the Charlotte-based Atrium Health Levine Cancer Institute (LCI), which offers a robust schedule of COE events.

*Below are highlights of what our unified COE team accomplished in 2023.*

### Cancer Control

**Mobile Lung Cancer Screenings:** The Levine Cancer lung bus program began providing the first free lung cancer screening, education and tobacco cessation events in the greater Winston-Salem area.

### Southeastern American Indian Cancer Health Equity Partnership

**(SAICEP):** We forged this partnership with Comprehensive Cancer Centers at the University of North Carolina and Duke University to address the cancer burden among American Indians in North Carolina, which is home to more Native Americans than any other state east of the Mississippi.



**CASE 4 Cancer Grant Award:** Our researchers were awarded this \$200,000 NCI grant that will be used to help American Indian tribes in the Carolinas grow their knowledge of tobacco-related health risks and expand screening for tobacco-related and colorectal cancers within their communities. We will collaborate with tribal members to develop and disseminate culturally relevant messaging that encourages screening while respecting the tribe's use of tobacco for traditional purposes.

**Renacer:** We reached 1,370 new participants and 633 returning participants through this program, up dramatically since 2021, when it was launched to reduce the risk of cancer and cancer recurrence among Latinos in Mecklenburg County, North Carolina, home to more Hispanics than any other county in the state. Thanks to collaboration with more than 30 community partners, our health educator was able to offer Spanish-language classes on nutrition, financial assistance and billing, cardio salsa, art therapy and tours of local supermarkets throughout Mecklenburg County. We also produced five Spanish videos promoting free and low-cost clinics and attracted 44 participants to our first Latino Cancer Retreat.

## Support Research

On the research front, we doubled our support by helping 24 faculty and engaging 11 caregivers and patient advocates through the following initiatives.

**Diversifying Clinical Trials:** We educated 587 patients from our priority populations about clinical trials. The proportion of Rural, Black/African American and Hispanic patients who were navigated and participated in clinical trials increased 110%, 370% and 560% respectively.

**Data Visualization:** We used the Cancer inFocus online data mapping tool developed by the University of Kentucky Markey Cancer Center to create interactive heat maps showing where smoking

is elevated across our catchment area. We used them to select which sites the Atrium Health lung bus would visit first in the greater Winston-Salem area and anticipate Cancer inFocus will make it easier to support the data needs of our researchers and community partners.

**Community Impact Awards:** Cassandra Wineglass, PhD at Winston-Salem State University was named the first recipient of a grant from this new program, which seeks to encourage community-based organizations to engage in cancer research and cancer prevention and control efforts. Wineglass used her \$5,000 grant to conduct focus groups to better understand the support needs of Black breast cancer survivors in our community.

**Science Communication Workshops:** We launched these to help our basic scientists more clearly communicate with the communities we serve to strengthen engagement in research, interventions and other cancer initiatives.

*continued on page 36*









## Promote Policy

**Medicaid Expansion:** Our support for Medicaid expansion through a partnership with the American Cancer Society came to fruition in 2023 when North Carolina became the 40th state — and the first since 2018 — to broaden the program. Starting December 1, 2023, up to 600,000 more adults in the state could become eligible for Medicaid, including many who reside in rural communities we serve. This should improve access to both cancer screening and ongoing care for those diagnosed with cancer.

### Reimbursement for Patient Navigation Services:

The Center for Medicare & Medicaid Services (CMS) began reimbursing some of the costs of providing cancer patient navigation services on January 1, 2024, following a big push by CancerX, a public-private partnership formed by The White House to reinvigorate the Cancer Moonshot. Dr. Rasu Shrestha, enterprise executive vice president and chief innovation and commercialization officer for Advocate Health, which Atrium Health is part of, was one of just 12 people selected in September 2023 to serve on the CancerX steering committee.

## 2023 Community Outreach and Engagement Highlights

In 2023 the Atrium Health Wake Forest Baptist Comprehensive Cancer Center Office of Health Equity

attended and/or organized

**784** free community education events that

reached **46,611** people

screened **3,576** people for cancer

navigated **854** people through screening

and detected **35** cancers



## Patient Story: Aracelis Mendez

After being diagnosed and treated for Stage 1 breast cancer, Aracelis Mendez was looking for help staying healthy with a desire for wellness resources reflected in her Hispanic heritage.

She soon came upon Renacer, a program Atrium Health Levine Cancer established in 2020 to address the lack of access to culturally competent, community-based cancer survivor support programs in the Hispanic/Latino population.

Renacer, which means “to be reborn” in Spanish, provides cancer patients with nutrition, screening, physical activity and emotional support to help them prevent recurrence. It is taught by a highly trained Hispanic health educator, who collaborates with dozens of community partners to offer classes at throughout the day.

Aracelis, 55, attended classes at three locations near her home in Pineville, North Carolina and soon noticed that everyone ate the same type of food and wanted to cook their traditional meals in a healthier way. Eventually, she enrolled in music healing and art therapy classes and was delighted to learn how they could help her manage her breathing.

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*“For the first time in a long time, I was able to pay attention to my breathing. I felt as if the air was becoming lighter and lighter as our session progressed, as if I was breathing something so soft, sweet and pure like silk.”*

# Re-engaging the Sickle Cell Community

We've relaunched our community advisory board in the Greater Charlotte Market in a first step toward enhancing integrated care across our catchment area

Atrium Health Wake Forest Baptist Comprehensive Cancer Center has reinvigorated its Sickle Cell Disease Enterprise Community Advisory Board in the southern part of its catchment area to enhance community engagement in an era of emerging new treatment options.

The board brings employees, community leaders and patients together to discuss ways to improve integrated care for Sickle Cell Disease (SCD) within our Greater Charlotte Market, which includes four counties in South Carolina and nine in North Carolina.



Payal Desai, MD

"Over the last five years the therapies and options for patients with SCD have expanded significantly, particularly in the area of gene therapy," said Payal Desai, MD, the director of sickle cell for the Greater Charlotte market. "Especially now that Atrium Health Levine Cancer is fueled by the innovation and research of Atrium Health Wake Forest Baptist Comprehensive Cancer Center, we want to provide an integrated approach with our broader access."

Revitalizing the CAB will catalyze other initiatives the Comprehensive Cancer Center participates in, including the North Carolina Sickle Cell Syndrome Program, which brings together providers community-based organizations and state officials in hopes of finding ways to close gaps in care.



Kearia Sams, MHA

"We frequently make decisions in health care and how we deliver this care based on internal forces and how we think patients will be best served," said Dr. Desai, who joined the Wake Forest University School of Medicine faculty in 2023. "But we all have blind spots. So, as we re-establish this board, it's important to engage our stakeholders to get a broader view."

At the end of 2023, the board consisted of 21 standing members, including 15 teammates, three community leaders and three patients from the Greater Charlotte market.

"Patient care for our population is complex and touches a vast array of specialties across the medical center," explained Kearia Sams, business operations manager for sickle cell in the Greater Charlotte market. "So, the teammates on the board include providers and leaders from the pediatric and adult programs, inpatient/ICU, emergency department, the office of diversity equity and inclusion, social work, health education, and others who directly impact sickle cell patient care in the greater Charlotte market."

The board will monitor its impact before expanding to include members from the Greater Winston-Salem market.

"People in the SCD community say, 'nothing for us without us,' and with good reason," added Dr. Desai. "It is best to understand the needs of our patients, families, and communities directly. They need a voice at the table."





## Patient Story: Destiny Medlin

When Destiny Medlin was diagnosed with stage IIB triple-negative ductal carcinoma, her first worry was that the aggressive form of breast cancer would derail her dreams. She was just 26 and enrolled in nursing school.

The treatment plan of radiation, chemotherapy and surgery recommended by her medical team at Atrium Health Levine Cancer Institute in Charlotte immediately concerned her because she wanted to have children one day.

Her surgeon gave her the OK to delay treatment while she went through the fertility preservation process. She also took a leave of absence from nursing school to focus on treatment.

Destiny then underwent six months of chemotherapy, including an aggressive form of treatment known as “the red devil.” She took a month to recover and then had a lumpectomy. A month after surgery, she completed 31 days of radiation and returned to nursing school.

Four years after finishing treatment, Destiny is thriving: She’s a mom to a 1-year-old daughter, works as a cardiac nurse and hopes to become a pediatric oncology nurse.

“I 100% recommend Levine Cancer to anyone I know who has been diagnosed with breast cancer,” said Destiny. “My experience there was fantastic. I was valued and they took my concerns seriously. I felt like I was in great hands. They have the best cancer care.”

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*“My experience there was fantastic. I was valued and they took my concerns seriously. I felt like I was in great hands. They have the best cancer care.”*

# Amplifying Our Impact

## Our VA partnership is enhancing veterans' access to cancer clinical trials, multidisciplinary care and lung cancer screening



Jimmy Ruiz, MD

*“It shows how having the Wake Forest University School of Medicine at its core has helped Atrium Health and the VA accelerate the fight against cancer.”*

Jimmy Ruiz, MD

After more than 12 years of collaboration, the Atrium Health Wake Forest Baptist Comprehensive Cancer Center and the Veteran's Administration are poised to take their partnership to a new level in 2024.

The highly symbiotic partnership formally started in 2011, when the Salisbury Veterans Affairs Health Care System (Salisbury VAHCS) partnered with the Comprehensive Cancer Center to launch a hematology and oncology program using jointly appointed Wake Forest faculty. The academic affiliation meant the Salisbury VAHCS could participate in the NCI's National Clinical Trials Network as a subsite of the Wake Forest Alliance for Clinical Trials in Oncology.

The arrangement spurred significant growth in the depth and breadth of cancer care, research, and medical education at the Salisbury VAHCS, which is anchored by a medical center in Salisbury, North Carolina. In turn, researchers, faculty, students and fellows at the Comprehensive Cancer Center gained access to a diverse group of patients, including many from underserved populations, for its therapeutic cancer trials and early detection studies.

“This academic partnership allows both organizations to optimize their resources and expertise in clinical care, research and education in ways that benefit our many stakeholders,” said Dr. Jimmy Ruiz, section chief and founder of the hematology and oncology section at the Salisbury VAHCS, a full professor at the Wake Forest University School of Medicine (WFUSOM) and the assistant director of clinical research at the Comprehensive Cancer Center. “It shows how having the Wake Forest University School of Medicine at its core has helped Atrium Health and the VA accelerate the fight against cancer.”

## Providing Multidisciplinary Care

Ruiz began working with veterans in 2007 as an internal medicine nocturnist during his residency and fellowship at WFUSOM. When the school brought him on as an assistant professor of medicine, he began developing the first oncology and hematology section for the Salisbury VAHCS through joint academic appointments.

“We wanted to save veterans with cancer the time and stress of having to arrange all their specialty care,” recalled Dr. Michael Goodman, one of the first oncologists hired to work at the Salisbury VA Health System and an associate professor of medicine with the Comprehensive Cancer Center. In 2023, Goodman was among 65 physicians selected to receive the Robert A. Winn Diversity in Clinical Trials Career Development Award (Winn CDA) for his commitment to increasing diversity in clinical trials.



Ruiz established multidisciplinary tumor boards with the Comprehensive Cancer Center to expand veteran's access to surgical, radiation oncology and other specialists. By 2017, he had expanded the cancer program to the Salisbury VAHCS' Charlotte and Kernersville locations.

Today, the VAHCS is one of the VA's largest providers of cancer care and health education and training in the VA Mid-Atlantic Health Care Network, which encompasses six medical centers across North Carolina and Virginia. Its oncology and hematology section offers chemotherapy, immunotherapy, blood and platelet transfusions, bone marrow biopsies and other cancer services at all its locations.

Specialists in radiation oncology, surgical oncology, pulmonary medicine, palliative care, oncology pharmacy and social services work together to provide integrative cancer care. In 2018, it received a rural health teleoncology grant, which was used to provide oncology care to patients at our health care centers from Salisbury.

## Improving Access to Clinical Trials

Determined to provide those who serve our nation with the most innovative and effective cancer treatments available, Ruiz worked with the Comprehensive Cancer Center to find ways to streamline and enhance veterans' participation in cancer clinical trials.

Utilizing the growing reputation of its joint appointed faculty, the Salisbury VAHCS was able to engage with industry partners to access large registration trials for therapeutic products that could one day be the standard of care for cancer patients.

By tapping the Comprehensive Cancer Center's shared resources and expertise, investigators at Salisbury VAHCS cancer center eventually were able to initiate their own trials.

"In order to be successful in clinical trial research, you have to have a good team, and Wake Forest has been a great teammate," Ruiz said. "Our affiliation with the Wake Forest Baptist Comprehensive Cancer Center has allowed us to compete for and win grants for our lung precision oncology program, as well as the Winn CDA grant, which seeks to increase the number of underrepresented minorities in clinical research.

## Launching Lung Cancer Screening

In 2014, Ruiz led the VA's launch of a lung cancer screening program modeled on one developed by the section of pulmonary medicine and radiology at Atrium Health Wake Forest Baptist.

"Our veterans are very different from the general population," noted Ruiz. "Generally, they are male, older and have a higher rate of tobacco-related malignancies. Lung cancer is a leading cause of death and often veterans have military exposures that potentially can lead to the development of lung cancer."

The VA has markedly boosted lung cancer screening rates in the past decade through an initiative that ensures fair access to top-tier screening for early detection of lung cancer.

"It has been transformative, significantly elevating screening rates in all veterans regardless of race, ethnicity, or socioeconomic status. It has been instrumental in detecting lung cancer early and ultimately saving lives," said Ruiz.

## Looking ahead

In 2024, Ruiz will work more closely with the Comprehensive Cancer Center, known locally as Atrium Health Levine Cancer Institute (LCI), to expand services offered at the VA North Charlotte Clinic.

"The beauty of this model is that we are now replicating it in the Charlotte region thanks to our affiliation with Atrium Health," said Ruiz. "We've already reached out to the Levine Cancer Institute to see how we can collaborate on clinical trials and get joint faculty appointments like we have done in Salisbury with Wake Forest."

The discussions could help the VA expand its services in Charlotte and further engage Charlotte faculty. In return, Atrium Health could offer more VA rotations to its hematology and oncology fellows in Charlotte and gain access to a new pool of patients for its clinical trials.

Opportunities for collaboration will increase as the Wake Forest University School of Medicine ramps up its new campus in Charlotte.

These are just a few examples of how having the Comprehensive Cancer Center is helping Atrium Health, which is part of Advocate Health - improve cancer care and outcomes.

"Veterans represent a diverse array of backgrounds and medical comorbidities," said Ruiz. "Emphasizing the significance of diversity across socioeconomic, ethnic, rural, and urban spectrums is essential in understanding and addressing the complex health care needs within this population. That's why I often tell fellows why working at the VA is so valuable. Providing oncology care to veterans provides wonderful learning opportunities and a capacity to extend such care to individuals across diverse contexts."

# Supporting Patients from Diagnosis to End of Life

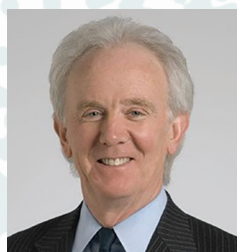
## Access to more clinics and patients expands capacity to conduct supportive oncology clinical trials

Access to more supportive oncology clinicians and patients is boosting Atrium Health Wake Forest Baptist Comprehensive Cancer Center's already robust capacity for advancing survivorship care through translational research and clinical trials.

The Comprehensive Cancer Center gained access to hundreds of new clinicians and thousands of new patients in June 2023 with the launch of Atrium Health Levine Cancer, which united the cancer services of the Comprehensive Cancer Center and Atrium Health Levine Cancer Institute under one name. Levine Cancer brought together clinicians, researchers and educators dedicated to improving the quality and availability of cancer supportive and survivor care.

"Between cancer control and cancer survivorship we anticipate this being one of the most patient-centered cancer centers in the nation," said Ruben A. Mesa, MD, executive director of the Comprehensive Cancer Center, president of Levine Cancer and vice dean for cancer programs at Atrium Health Wake Forest University School of Medicine. "Our loved one standard is fully aligned with NCI's goal of delivering optimal care to all cancer survivors, including those living with cancer."

The Comprehensive Cancer Center and Levine Cancer made significant strides in 2023 toward facilitating collaboration among clinicians, researchers, investigators and educators, including:



Declan Walsh, MD

### **Appointing a leader of Cancer Supportive and Survivor Care at Levine Cancer:**

Declan Walsh, MD, who built Atrium Health's internationally acclaimed supportive oncology program, was named to the role in November 2023. In addition to assessing needs and care delivery in supportive oncology across Levine Cancer, Dr. Walsh has been charged with seamlessly integrating the Comprehensive Cancer Center's research and training efforts in the areas of supportive and survivorship care.

**Unifying governance of clinical trials:** We created a single clinical trial office and Institutional Review Board (IRB) to oversee research being led by investigators at all our locations.

*"Between cancer control and cancer survivorship we anticipate this being one of the most patient-centered cancer centers in the nation."*

Ruben A. Mesa MD



The unified IRB will enable the Comprehensive Cancer Center to activate and amend clinical trials more quickly, enhancing our capacity to engage in practice-changing research and improving outcomes for the patients and families we serve, according to John M. Salsman, co-leader of the Cancer Prevention and Control program and director of clinical research in Adolescent and Young Adult Oncology at the Comprehensive Cancer Center.



John Salsman, PhD

“Integration with the Levine Cancer offers complementary strengths, with Wake providing scientific expertise to enhance impact and Levine Cancer providing access to a larger patient population for increased clinical trials capacity,” Salsman explained. “This includes studies in symptom science, cancer care delivery and implementation science.”

Perhaps most importantly, we have an opportunity for more health equity-focused work due to the increased racial and ethnic diversity of our redefined cancer catchment area.”

## Clinical Care

At Levine Cancer, supportive care spans patient navigation, cancer nutrition, cancer survivorship, psycho-oncology, integrative oncology, cancer rehabilitation, senior oncology and palliative medicine and work integrating these services into care plans for all disease sites continues. In 2023, for instance, Levine Cancer hired more than a dozen dietitians, nurse supervisors, social workers and other staff to introduce integrated supportive care at clinics treating head and neck and thoracic oncology patients. It also opened its first multidisciplinary sexual health clinic to treat sexual dysfunction in oncology patients.

“Our goal is to provide survivorship care to all cancer patients from the time of diagnosis through the end of life across our catchment area,” said Dr. Walsh, who was honored in 2023 with the American Society of Clinical Oncology Walther Cancer Foundation Supportive Oncology Award. “We must create a beacon of hope for the growing number of cancer survivors and their caregivers by providing the continuity of care they deserve. Our loved one standard, by which we aspire to care for patients as we would our own loved ones, demands nothing less.”

The Comprehensive Cancer Center has offered integrated behavioral health services for patients, care partners and family systems through its Patient Support Program for more than 40 years to help them overcome barriers to care



and optimize their emotional adaptation amidst challenging circumstances. To further that mission, we collaborated with Levine Cancer in 2023 to launch a web portal that patients, caregivers and even clinicians can use to search and register for free virtual and in-person supportive oncology classes and other activities. Listed events are led by one of our board-certified therapists or one of a growing number of community-based support groups in our network.

## Medical Education

The Comprehensive Cancer Center and Levine Cancer continued to expand education and training programs for supportive oncology and survivorship in the following areas in 2023.

**Supportive Oncology Grand Rounds:** At Levine Cancer, more than 2,600 teammates attended 26 grand rounds focused on supportive oncology and survivorship topics, including some featuring Comprehensive Cancer Center researchers. Topics covered included acupuncture, age-friendly cancer care, diabetes, music therapy, narrative medicine, weight management, yoga and Xeomin spasticity management in head and neck cancer patients. The Levine Cancer Institute Department of Supportive Oncology has provided free on-demand access to its grand rounds video series to members of Multinational Association of Supportive Care in Cancer (MASCC) since 2022.

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**Graduate Education:** We trained three rehabilitation residents, two interns in a Master of Social Work Program, fourth-year medical school students and psychology, medical and pharmacy residents. At Wake Forest University School of Medicine, our counselors lectured on theories of grief, the psychosocial impacts of genomic disease and art therapy education and supervised the psychosocial oncology internship program.

**Fellowships:** We welcomed the first two fellows to our hospice and palliative medicine fellowship program in Winston-Salem, while the first supportive oncology fellow graduated from our Charlotte program.

Meanwhile, our Charlotte-based hospice and palliative medicine and psycho-oncology fellowship programs admitted their first fellows. Additionally, our counselors and psychologists taught the wellness and resilience program for our hematology and oncology fellows.

*“Supportive care in  
modern oncology is an idea  
whose time has come.”*

Declan Walsh, MD

## Going forward

In 2024 and 2025, the Comprehensive Cancer Center will focus on improving the flow and management of supportive care referrals, providing professional development and training for teammates interested in sexual health, further development of navigation services and expanding services for adolescent and young adult patients as well as patients with sexual health and cancer nutrition needs.

On the academic front, we will focus on expanding fellowships and research, including an NCI-funded study our investigators helped design that will test the efficacy of using dialectical behavior therapy skills training to help cancer patients reduce or quit smoking.

“Supportive care in modern oncology is an idea whose time has come,” said Dr. Walsh. “The complex challenges cancer patients encounter from the day of diagnosis and the issues that arise across the care trajectory are now well documented. It’s evident there are many benefits for patients, caregivers, and health care systems to address the symptoms and side effects of cancer and anti-tumor therapy in a timely fashion and with a whole patient approach.”



# Rallying local support for cancer care

## SummerLark and 24 Hours of Booty raise over \$2 million for cancer patient support and survivorship programs

Thousands of music fans, cancer survivors, caregivers, cyclists and families turned out for Atrium Health's two big local fundraising events in 2023.

On May 20th, more than 2,000 showed up at Bailey Park in Winston-Salem, North Carolina for the SummerLark concert featuring country singer Chris Lane. Launched in 2022 with the help of presenting sponsor Allegacy Federal Credit Union and other sponsors, SummerLark raises money for the Cancer Patient Support Program (CPSP) at Atrium Health Wake Forest Baptist Comprehensive Cancer Center. The event raised over \$365,000 in 2023, or about half of the CPSP operating budget.

The CPSP provides counseling, patient education, support groups and other services free of charge to more than 35,000 patients and families each year. Since its launched in 1980, it has been widely recognized as a best practices model for cancer centers nationwide. The event has raised about \$5.5 million to advance and grow Atrium Health's adult and pediatric survivorship, wellness and integrative oncology programs since its inception.

## 24 hours of booty®



In Charlotte, 24 Hours of Booty 2023 raised \$1.65 million for Atrium Health Levine Cancer Institute and Atrium Health Levine Children's. Founded in 2002 by one man riding a bike for 24 hours, the event celebrates cancer survivorship and the power of peer-to-peer fundraising. Participants raise money for a dozen cancer causes by committing to cycle or walk as much or as little as they want along a 3.3-mile "booty loop" in the Myers Park neighborhood.



# Survivorship Research Summary

Survivorship research at Atrium Health Wake Forest Baptist Comprehensive Cancer Center is directed primarily by scientists through its Cancer Prevention and Control (CPC) research program, which includes enhancing quality of life and reducing symptom burden for survivors as one of its three major aims.

Below are highlights of how CPC researchers advanced that aim in 2022 and 2023. NCI grant numbers are included in parenthesis for reference.



**Stephanie Sohl, PhD**, who specializes in researching mind-body therapies and other aspects of integrative health, was awarded grant funding to continue investigating the efficacy of using eHealth Mindful Movement and Breathing (eMMB) for improving postoperative pain and psychological distress among women undergoing surgery for suspected gynecologic malignancies (R01 CA266995). This trial is currently open to accrual in Winston-Salem and Charlotte. In 2023, Atrium Health Wake Forest Baptist justified creating a new health coach position in part by citing data from a pilot study (P5OCA244693) Sohl authored on the Shared Healthcare Actions & Reflections Electronic systems in Survivorship (SHARE-S) that was published in Cancer Medicine in June 2023.



**Heidi Klepin, MD, MS**, continued to build a national reputation as co-leader of the Cancer and Aging Research Group (CARG), which brings together geriatric oncology researchers to design and implement clinical trials. She played a key role in renewing CARG's R33 grant with NCI in 2023 while continuing to update American Society of Clinical Oncology (ASCO) guidelines, including a practical assessment and management of age-associated vulnerabilities in older patients undergoing cancer therapy.





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**Shirley (Shelley) Bluethmann, PhD**, is completing a clinical trial using exercise to relieve joint pain in older breast cancer survivors with funds from an American Cancer Society career development award. Her team is implementing an evidence-based education and exercise curriculum, which is adapted to a tele-exercise model, to accommodate the increasing demand for remote interventions.



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**Sarah Birken, PhD**, provided insights that could be used to improve the reach and scalability of two NCI-funded interventions by identifying what drives their efficacy. One is designed to reduce financial toxicity among cancer patients (RO1 CA240092: MPIs: Wheeler & Rosenstein), while the other seeks to improve cancer care quality in rural cancer programs (RO1CA254628: PI: Charlton). Birken also received a CPC pilot grant in 2022 to evaluate Supporting Transitions After Treatment (START), an intervention to facilitate eligible breast cancer survivors' transitions to primary care providers. This pilot study will generate the preliminary data required for a fully powered hybrid type I effectiveness-implementation trial.

*“It’s evident there are many benefits for patients, caregivers, and health care systems to address the symptoms and side effects of cancer and anti-tumor therapy in a timely fashion and with a whole patient approach.”*

Dr. Declan Walsh



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**Joanna M. Robles, MD**, received funding from the Children’s Cancer Research Fund in 2023 to understand how language barriers impact outcomes in childhood acute lymphoblastic leukemia (ALL) patients. The study is designed to determine the need for incorporating measures of parental language proficiency in future Children’s Oncology Group (COG) studies and reveal areas where care can be improved for this at-risk population. Additionally in 2023, Dr. Robles received a diversity supplement to the COG NCORP Research Base Grant (UG1CA189955) to describe characteristics of financial distress screening and financial navigation at NCORP practices serving pediatric cancer patients.

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## The Wake Forest NCI NCORP Research Base

NCORP stands for “NCI Community Oncology Research Program,” which brings cancer clinical trials and cancer care delivery studies to local communities nationwide through a network of more than 900 community-based practices and seven research bases, including the Wake Forest NCORP Research Base at Atrium Health Wake Forest Baptist

Comprehensive Cancer Center. One of the Comprehensive Cancer Center’s key strategies is to build a robust and accessible infrastructure for CPC research through the Wake Forest NCORP Research Base, which prioritizes research on neurocognitive deficits, cardiotoxicity, and symptom management in cancer patients, and research on care delivery, especially survivorship care.

### Here are three CPC member-led protocols that utilized the Wake Forest NCORP Research Base in 2022 and 2023.



#### **Automated Heart-Health Assessment (AH-HA) for Cancer Survivors (WF-1804CD).**

This study, led by Principal investigator Kathryn Weaver, PhD, found that an electronic medical record-based cardiovascular health assessment tool could promote cardiovascular health and cardiotoxicity management during survivorship care and potentially reduce cardiovascular disease and cancer recurrence by increasing patient and clinician awareness and discussion of those risks. Findings from the study were published in the journal BMC Cancer on January 31, 2024 and its author is pursuing an RO1 renewal to expand both the number of oncology providers who use AH-HA and the number of survivors reached across the NCORP.



#### **Supportive Care Service Availability for Cancer Caregivers in Community Oncology Practices (WF-1803CD).**

This study, led by principal investigator Chandylen Nightingale, PhD, sought to understand the feasibility of developing an intervention that could assess the psychosocial and other needs of cancer caregivers and link them with supportive care services. It found that despite high levels of patient distress screening and management, few practices provide comprehensive caregiver engagement practices. Results were published online by the Journal of the National Cancer Institute in September 2023.



#### **Assessing Benefits and Harms of Cannabis and Cannabinoid Use Among a Cohort of Cancer Patients Treated in Community Oncology Clinics (1U01CA286813-O1)**

Multiple Investigators Beth Reboussin, PhD, Alfonso Romero-Sandoval, MD, PhD, and Kimberly G. Wagoner, DrPH, were awarded funding in September 2023, to recruit a sample of 2,000 newly diagnosed cancer patients with breast cancer, non-small cell lung cancer, colorectal cancer, melanoma, or non-Hodgkin lymphoma, to assess the benefits and risks of cannabis and cannabinoid use during treatment.





*“This is the story of how a new care delivery model and team were created to make a profound impact on patients and teammates across our catchment area. It highlights successful innovation and tremendous teamwork.”*

Brenda Crump, Chief Nursing Officer



## Reimagining Infusion Care

**Pilot program shows operational agility can deliver significant, immediate and sustainable improvements in patient care.**

It was 2022 when nurses and administrators decided they needed to reduce wait times at the 120-bed infusion center at Levine Cancer Institute.

Due to growing demand, the infusion center at our Atrium Health Levine Cancer Institute location faced ongoing scheduling challenges. Over the course of three years, wait times for patients had gone from days to weeks. Much of the demand came from the growing number of bone marrow transplant patients, who often need weekly infusions of blood products and electrolytes for months at a time.

“As more regimens moved to the outpatient setting, we needed a space that allowed us to continue delivering necessary supportive and therapeutic care,” explained Brenda Crump, our chief nursing officer for the Charlotte area. “This negatively impacted patients and the clinic staff.”

To decrease wait times, Crump worked with providers, nurses and administrators to reimagine their model. They decided to carve out a space within the infusion center dedicated to delivering supportive care, including blood products (packed red blood cells, platelets), therapeutic phlebotomy, electrolyte replacements, intravenous fluids, nausea medications, pain medications, non-chemotherapy injections and iron.

The team then transformed part of the infusion center into an Immediate Infusion Care (IIC) pod for patients not receiving chemotherapy or biological therapy. The IIC area included 15 rooms and bays designed to reduce wait times.

In November 2023, the IIC opened as a pilot program. It quickly exceeded expectations.

Within 30 business days of shifting patients not receiving chemotherapy or biological therapies to the IIC pod, staff had freed up 600+ hours of infusion chair time at the infusion clinic. This reduced wait times by weeks and relieved the Emergency Department (ED) backlog by preventing ED admissions. The IIC provided greater access to fluid/electrolyte replacements and lab possibilities, a reference to infusions hematology/transplant patients might need depending on their test results.

The IIC also allowed some chemotherapy regimens to move out from the inpatient oncology unit, which improved bed availability and patient flow from the Emergency Department to inpatient oncology units. Our outpatient clinic teams, meanwhile, reported spending fewer hours on infusion scheduling due to improved chair availability.

“It provides a fiscally responsible approach that always and proactively keeps the patients at the center of the care continuum,” Crump said of the IIC model, which generated \$5.7 million in new revenue in its first six months of operation.

The success demonstrates how operational agility can deliver significant, immediate and sustainable improvements in patient care.

In 2024, Crump won an internal grant that will provide the resources she needs to implement the IIC model at other locations in our catchment area.

# From Cancer Survivor to Cancer Warrior

## Knowing her care team has her back keeps metastatic breast cancer patient Sandra Goldman going strong



It's hard to reconcile Sandra Goldman's medical history with her healthy appearance, cheerful demeanor and fundraising antics.

From 2015, when she became a patient of Atrium Health Levine Cancer Institute (LCI), until the end of 2023, she received 16 rounds of chemotherapy, 30 radiation treatments, five surgeries, targeted therapies and experimental treatments. Yet over the last three years of that period, Goldman rappelled down the side of a 14-story office building, skydived from 14,000 feet and appeared or helped organize fundraising events to raise more than \$1 million for cancer causes. Along the way she taught herself how to swim while connected to an oxygen tank and held down her job running Charlotte's oldest Jewish cemetery.

When asked how she has managed to live so fully, Goldman credits her faith of Judaism, the tremendous support she receives from family and friends, fitness training and a determination to live as long and fully as possible. Equally important, she says, was knowing that she is receiving the best cancer care available.

"For me, it's all about buying time," said Goldman, a 56-year-old mother of four. "I just want to be here for as long as I can, and my team at Levine Cancer Institute has bought me another eight years. They have earned my trust time and again and that trust has given me the additional confidence that I needed to cope with all the ups and down of this terrible disease."

In 2023 Atrium Health launched an integrated cancer program that unites cancer services at Atrium Health LCI and Atrium Health Wake Forest Baptist under one name, "Atrium Health Levine Cancer." Goldman's story illustrates how Levine Cancer can help patients no matter where the disease takes them. For Goldman that included helping her recover from multiple rounds of chemotherapy, obtain scarce new medications, get admitted to a clinical trial, get off oxygen and transform from a cancer survivor to a cancer warrior.

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Levine Cancer patient Sandra Goldman



## Surviving the Yo-Yo Effect

Goldman's relationship with LCI started in 2015 when she consulted oncologist Julie Fisher, MD about options for treating cancer in her pectoral muscle. A tumor had emerged just above the site of a mastectomy performed in 2010 to treat stage 2 estrogen receptor-positive breast cancer. After consulting with two other cancer centers, Goldman decided only Dr. Fisher and LCI could provide the aggressive treatment and patient-centered care she needed.

Goldman has since been diagnosed with and treated for breast cancer eight times by Fisher and her team.

"It's a yo-yo effect," said Goldman of her bouts with cancer. "You nurse yourself back to health and just when you feel yourself getting back to a sense of normal, bing! The next diagnosis and round of treatment starts."

In 2019, almost three years after completing a lumpectomy, 16 rounds of chemotherapy and 30 radiation treatments for the tumor in her pectoral muscle, Goldman experienced her next setback. Another tumor found in the same pectoral muscle, as well as a new one found in her shoulder muscle, tested positive for cancer.

At this point her cancer was considered metastatic, and Fisher responded with targeted therapies, including CDK4/6 inhibitors and daily doses of oral estrogen blockers. In 2020 her disease progressed.

Fisher halted targeted treatments and ordered genomic testing to determine what options might work best for Goldman's type of metastatic breast cancer. When tests showed Goldman's cancer had actionable mutations, Fisher began investigating potential therapies. In 2021, she determined Orserdu, a new estrogen receptor degrader (SERD) being evaluated by the Food and Drug Administration (FDA), was worth trying. Goldman began taking it just weeks after the FDA approved it in January 2023.

When it became clear the medication was not working, Goldman began a new regimen of chemotherapy. The treatments stabilized or shrank the tumors in Goldman's lungs but failed to impede growth of the tumors in her deltoid muscle.

This prompted Fisher to present Goldman's case to the weekly multidisciplinary breast conference at LCI, which had discussed Goldman's case previously. This time, the group determined Goldman would be a candidate for a clinical trial involving the protein degrader ARV-471 that was scheduled to open in late 2023.

After just two cycles, a scan revealed ARV-471 was not having the desired effect. Fisher withdrew Goldman from the clinical trial and prescribed a new round of chemotherapy based on her genomic testing results. Her cancer is considered HER2-low and she began receiving a HER2 targeted drug called Enhertu.

"We obviously were a bit disappointed," Goldman said days after discontinuing the experimental therapy. "But I remain grateful that I was able to be part of the study and am proud to have played a part in trying to find a cure. My journey continues and LCI still has plenty options for me."

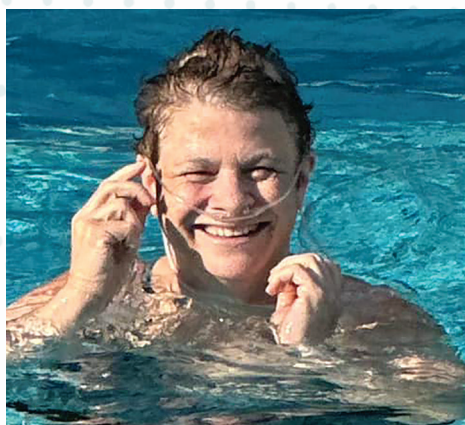
## Finding her calling

Goldman said her diagnosis with metastatic breast cancer in 2020 triggered a new chapter in her life.

"I began looking for my calling," she recalled. "I was already an active volunteer before my original diagnosis, but felt I needed to, and could, do more."

A gifted networker, she arranged to meet with Mellisa Wheeler, director of the disparities and outreach program for LCI. Wheeler suggested Goldman help raise money for Project PINK, which provides free mammograms and follow-up care to uninsured and underinsured women.

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When Goldman offered to raise \$10,000, Wheeler suggested they collaborate on an email campaign.

By the end of 2023, Goldman had raised more than \$600,000 for Project PINK, cancer research and other cancer causes by organizing or speaking at fundraising events. These included rappelling down the face of an office building in 2019 and jumping from an airplane tethered to a skydiving instructor in 2022.

Along the way, Goldman made it her mission to raise awareness of how LCI is pioneering cancer research and patient-centric care in Charlotte, where Goldman serves on its patient and family advisory council.

“By telling my story I feel like I can help people understand what Levine Cancer Institute offers in Charlotte,” she said. “If only more people knew about this jewel of a cancer hospital, what research is conducted here and the opportunities patients have to participate in clinical trials, maybe more patients would decide to seek medical treatment right here.”

## From survivor to warrior

In late 2023, after recovering from four bouts of pneumonia and figuring out how to swim with a cannula in her nose, Goldman reached another milestone in her journey. She went from calling herself a “cancer survivor” to calling herself a “cancer warrior.”

“LCI is my fortress,” she said, “and my co-warriors are the physicians, nurses and even the janitors and the barista at Starbucks who are rooting for me.”

That support and future fundraising engagements have Goldman looking forward to the future, whatever it may bring.

“I obviously have days where I could punch my fist through a wall,” she says. “But I really believe that one day we will beat cancer. I really do. Who knows, down the road I might qualify for another promising study here in Charlotte. I just feel lucky to have a place in my backyard that is inching its way to being one of the best cancer centers in America.”



## Provider Story: Ivette Ceballos, MPH, BSN, RN, TTS

Imagine you've just left your homeland and fled to a foreign country. You don't speak the language and you don't know anyone.

And you've just received a cancer diagnosis.

That was Maria Nohelia Norena Giraldo's situation when our team at Atrium Health Levine Cancer Institute met her in 2023. Maria was a recipient of Project PINK, a program dedicated to offering free 3D screening mammograms to underserved communities – those often overlooked and forgotten. She had arrived in Charlotte, North Carolina in 2023 while seeking asylum from perilous circumstances in her native Colombia that jeopardized not only her own life but the safety of her family.

Following an initial mammogram, further tests were recommended, provided, and financially covered by Project PINK Plus.

When Maria's biopsy revealed breast cancer, our team immediately jumped into action. I joined Bilingual Patient Nurse Navigator Lorna Espinal and Everett Warren, MD, to create the best personalized plan of care for Maria. We conveyed the diagnosis and treatment options to Maria in her native language in a way that offered hope and expressed our genuine care. After Maria received her first chemotherapy session, we connected her with Fern & Ivey Hair Haus. The local hair salon is co-owned and operated by breast cancer survivor Andrea Ivey, who provides Project PINK recipients free haircuts and scalp massages in a relaxing, comfortable environment.

Today, Maria understands her treatment plan. As she awaits surgery, she feels the unwavering support of her care team and often speaks of the angels surrounding her.



Pictured left to right: Ivette, Maria, Lorna and Andrea







## Provider Story: Caleb Evington, LCSW

In November 2023, I received a referral for a young man in his 20s. A year earlier he had received an allogeneic bone marrow transplant to treat acute myeloid leukemia (AML). He had been admitted for facial pain and subsequently found to have relapsed AML and a secondary diagnosis of myeloid sarcoma.

The patient is neurodiverse, has multiple comorbidities and a complex family dynamic. He had lived in alternative family living since age 16. About a month into his admission, his mental and physical health deteriorated. He had not eaten in several days and his care team was considering artificial nutrition.

Only after I offered to sit with him in silence, play a card game, or just talk about something non-medical without any pressure to discuss our concerns regarding his self-care, did he open up. He shared that on top of experiencing fear, shame, embarrassment, isolation and loneliness, he was feeling overwhelmed by everything his care team was asking him to do. He said the frequent reminders to get out of bed, eat, walk, shower, take medicine and brush his teeth made him feel like a robot.

After acknowledging how difficult a month-long hospitalization can be and reflecting on his internal strengths, the patient said that he wanted to move, he desired food, he hoped to “keep doing this,” but didn’t know where to begin. He felt like he couldn’t live up to his care team’s expectations and was disappointing them.

By the time I arrived for a follow-up visit the next day, the patient had resumed eating, walked from his bed to the chair in his room, asked that the blinds be pulled up to allow light into his room and even worked with a physical therapist.

It appeared that the simple gesture of offering to sit with him in silence and be human together, ignited the spark for him to open up to do deeper work. We’d had a breakthrough.

He said that he had begun to feel a sense of accomplishment with each task he completed. He began utilizing visualization techniques I taught him to imagine how he would feel when he accomplished each task. To kindle his

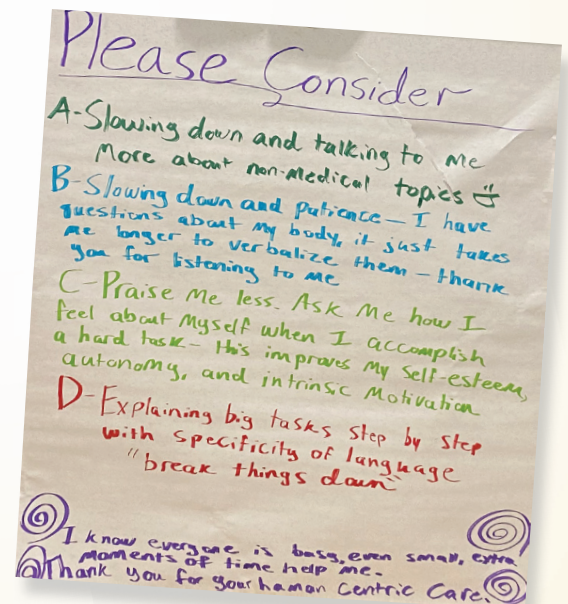
self-motivation, I encouraged his care team to begin asking him how he felt about himself, rather than praising him for doing so well. A week later he and I began collaborating to spread the word about what he needed to heal. I brought in a large sticky easel pad so I could transcribe his wishes with colorful markers and then post it on his hospital room door. It read:

### Please consider:

- A** Slowing down and talking to me more about non-medical topics :D
- B** Slowing down and patience-- I have questions about my body, it just takes me longer to verbalize them-- thank you for listening to me.
- C** Praise me less. Ask me how I feel about myself when I accomplish a hard task-- this improves my self-esteem, autonomy, and intrinsic motivation.
- D** Explain big tasks step by step with specificity of language (“break things down”)

I acknowledge that everyone is busy.  
Even small moments of extra time help me.  
Thank you for your human centric care.

The poster helped the patient claim his voice and his place at the center of his care plan and reminded me how rewarding our work can be when we treat patients as we would our own loved ones. I suspect our encounter changed the trajectory of both our lives.



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Caleb Evington, LCSW, is currently an Oncology Counselor with the Cancer Patient Support Program. In 2023 he served as the Adolescent and Young Adult Oncology Navigator at Atrium Health Wake Forest Baptist Comprehensive Cancer Center in Winston-Salem, North Carolina.









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