THE SYLVESTER DIFFERENCE

2022 ACCOMPLISHMENTS REPORT

SYLVESTER COMPREHENSIVE CANCER CENTER
UNIVERSITY OF MIAMI HEALTH SYSTEM

NCI Cancer Center
A Cancer Center Designated by the National Cancer Institute

2022 ACCOMPLISHMENTS REPORT

IN PURSUIT OF *YOUR CURE.*®

DEAR COLLEAGUES AND SUPPORTERS,

I AM PLEASED TO SHARE THE SYLVESTER 2022 ACCOMPLISHMENTS REPORT, which captures some of our key successes of the year. We continue to make great strides in advancing our research and clinical effort to improve outcomes for our patients.

Today, excellent cancer care includes a focus on survivorship, enabling and empowering patients to live the best lives possible after their diagnosis.

Our commitment to translational cancer research has never been stronger. We are developing novel targets and therapies for treating common and rare cancers alike, and have recruited and promoted accomplished, forward-thinking investigators who are unraveling why some cancers remain notoriously treatment resistant.

Research leaders recruited to Sylvester in 2022 include deputy director Antonio Iavarone, M.D., a leader in brain tumor research for more than 20 years, and David B. Lombard, M.D., Ph.D., who co-leads Sylvester's Cancer Epigenetics Research Program. Scott Welford, Ph.D., and Priya Rai, Ph.D., were promoted as co-leaders of our Tumor Biology Research Program, and Jaime Merchan, M.D., M.M.Sc., as co-leader of our new Translational and Clinical Oncology Research Program.

We are investing in building teams, facilities, collaborations and community partnerships to help people with cancer survive and thrive. Investigators working in this area include Tracy Crane, Ph.D., R.D.N., co-leader of our Cancer Control Research Program, who was awarded a prestigious NCI U01 consortium grant to study how physical activity and exercise can help women with ovarian cancer complete chemotherapy regimens without delays.

In 2022, we created the Sylvester Pancreatic Cancer Research Institute, led by surgical oncologist and founding director Nipun Merchant, M.D., and received the approval to build a world-class Myeloma Research Institute, led by C. Ola Landgren, M.D., Ph.D. We also joined forces with the University of Miami College of Engineering for Engineering Cancer Cures™, to develop and deploy novel technologies to detect, diagnose and treat cancer.

Funding has significantly increased on all fronts, including governmental and private donations. First Lady Dr. Jill Biden visited Sylvester as part of the administration's renewal of the Cancer Moonshot initiative. Dolphins Challenge Cancer brought our local community together for the 12th year, for an inspiring and fun event that brought DCC's total fundraising for cancer research to more than $50 million.

There's no stopping Sylvester. We are unrivaled in our commitment to preventing, treating and curing cancers, and to supporting our patients through care and programs that truly enhance their quality of life.

With gratitude,

Stephen D. Nimer, M.D.

Director, Sylvester Comprehensive Cancer Center

Oscar de la Renta Endowed Chair in Cancer Research

Executive Dean for Research, Miller School of Medicine

Professor of Medicine, Biochemistry and Molecular Biology

FROM THE DESK OF ADAM E. CARLIN

RECEIVING A CANCER DIAGNOSIS IS ALWAYS A FRIGHTENING THING. But at Sylvester Comprehensive Cancer Center, South Florida's only National Cancer Institute (NCI)-designated and nationally ranked cancer center, you won't face this alone. With a team of world-renowned physicians, researchers, and nurses, we focus on the individual to help ensure access to the most innovative treatments, Phase 1 Clinical Trials program, and a precision medicine program tailoring treatments to increase survivorship with the best outcomes possible for their specific cancer.

In 2022, we continued to strive to accomplish our mission including the establishment of a fully integrated program of patient care, education, and research, and promoting community-responsive health care (like the Firefighter Cancer Initiative and Game Changer Vehicles). We also broke ground on the Transformational Cancer Research Building, slated to open in 2025, that will double our research footprint and serve as our hub for innovative cancer research *in pursuit of your cure*.

We celebrated Dolphins Challenge Cancer XII, the NFL's largest fundraising event, in partnership with the Miami Dolphins on February 26, 2022. Raising more than $8.4 million and participation of 4,484 walkers, runners, and cyclists, the event covered more miles and raised more funds than any other DCC event. The DCC included in-person and virtual options and pushed the fundraising total in the event's history to a then-record, $53.9 million (a number that has since grown thanks to the recent DCC XIII)!

Following in the tradition of creating "firsts" at Sylvester, we recognized three profound physicians/researchers who received inaugural endowed Chairs. Lifelong supporters of Sylvester, John and Judy Schulte arranged to support research and education after their passing with the establishment of two endowed chairs. Their legacy will now live on in perpetuity through their bequest to Sylvester, including the John K. and Judy H. Schulte Senior Endowed Chair in Cancer Research, which was recently presented to Erin Kobetz, Ph.D., M.P.H.; and the John and Judy Schulte Senior Endowed Chair in Cancer Research which was awarded to Wael El-Rifai, M.D., Ph.D. In recognition of his accomplishments in the field of cancer survivorship and psychosocial oncology, Frank J. Penedo, Ph.D., was recently inducted during a special ceremony as the inaugural holder of the Sylvester Dolphins Challenge Cancer Living Proof Endowed Chair in Cancer Survivorship.

As you read through the next pages of our 2022 accomplishments report, I hope you feel the same sense of pride as I do. Your continued support remains invaluable as we put the patient first and search to make cancer obsolete.

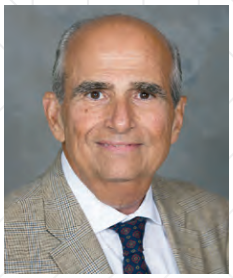
With gratitude,

Adam E. Carlin

Chair, Board of Governors
Sylvester Comprehensive Cancer Center

SYLVESTER BOARD OF GOVERNORS

Adam E. Carlin
Chair,
Board of
Governors



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and Board Chairman
Farm Stores Corporation

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Trustee and Executive
Vice President
The Batchelor Foundation

Jennifer Stearns Buttrick
Of Counsel
Stearns Weaver

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Officer and President
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Community Organization and
Development Volunteer

Lally Weymouth
Senior Associate Editor
The Washington Post

EXECUTIVE LEADERSHIP

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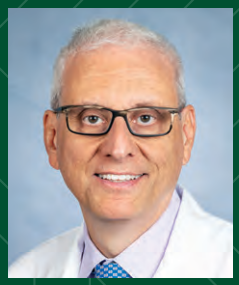
Director
Oscar de la Renta Endowed Chair in Cancer Research
Executive Dean for Research, Miller School of Medicine
Professor of Medicine, Biochemistry and Molecular Biology

Craig H. Moskowitz, M.D.
Physician in Chief, Oncology Service Line
Professor of Medicine

Lazara Pagan, M.S.N.
Chief Ambulatory Officer
Associate Vice President, Oncology Services



Antonio Iavarone, M.D.
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Professor of Neurological Surgery

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Assistant Vice President and Associate Director, Administration

Desert Horse Grant
Chief Transformation Officer

Rhonda Curry
Chief Marketing and Communications Officer

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Professor and Chair of Molecular and Cellular Pharmacology

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Professor of Surgery, Biochemistry and Molecular Biology

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Associate Director, Diversity, Equity, and Inclusion
Associate Professor of Obstetrics, Gynecology and Reproductive Sciences

George Grills
Associate Director, Shared Resources

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Associate Director, Population Sciences and Cancer Disparity
Chief, Population Health, Oncology Service Line
John K. and Judy H. Schulte Senior Endowed Chair in Cancer Research
Vice Provost for Research and Scholarship, University of Miami
Professor of Medicine and Public Health Sciences

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Vice Chair, Surgical Oncology Services
Chief Surgical Officer
Alan Livingstone Endowed Chair in Surgical Oncology
Professor of Surgery

Jonathan Trent, M.D., Ph.D.
Associate Director, Clinical Research
Co-Director, Musculoskeletal Center, Sarcoma Medical Research Program
Professor of Medicine

Stephan C. Schürer, Ph.D.
Associate Director, Data Science
Professor of Molecular and Cellular Pharmacology

RESEARCH PROGRAM CO-LEADERS

Tracy Crane, Ph.D., R.D.N.

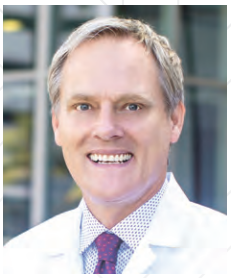
Co-Leader, Cancer Control

Associate Professor of Medicine

Maria E. Figueroa, M.D.

Co-Leader, Cancer Epigenetics

Associate Professor of Human Genetics



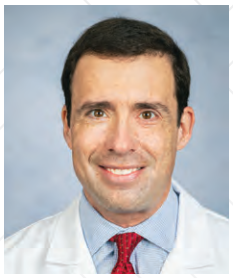
C. Ola Landgren, M.D., Ph.D.

Co-Leader, Translational and Clinical Oncology

Chief, Myeloma Program

Paul J. DiMare Endowed Chair in Immunotherapy

Professor of Medicine



David Lombard, M.D., Ph.D.

Co-Leader, Cancer Epigenetics

Professor of Pathology and Laboratory Medicine

Jaime Merchan M.D., M.M.Sc.

Co-Leader, Translational and Clinical Oncology

Director, Phase 1 Program, Division of Medical Oncology

Professor of Medicine

> We are investing in building teams, facilities, collaborations and community partnerships to help people with cancer survive and thrive.
>
> **Stephen D. Nimer, M.D.**

Frank J. Penedo, Ph.D.

Co-Leader, Cancer Control

Center Associate Director, Cancer Survivorship and Translational Behavioral Sciences

Director, Cancer Supportive Care and Survivorship

Sylvester Dolphins Challenge Cancer Living Proof Endowed Chair in Cancer Survivorship

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Professor of Radiation Oncology

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Co-Leader, Cancer Epigenetics

Chief, Division of Cancer Genomics and Epigenetics

Professor of Human Genetics

Scott Welford, Ph.D.

Co-Leader, Tumor Biology

Chief, Division of Biology, Department of Radiation Oncology

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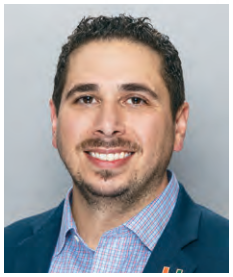

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Assistant Vice President, Medical Development and Alumni Relations

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Dao Nguyen, M.D.

Estelamari Rodriguez, M.D., M.P.H.

Raphael Yechieli, M.D.

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LYMPHOMA

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THE SYLVESTER DIFFERENCE:
DISCOVERING, DEVELOPING, AND DELIVERING WORLD-CLASS CANCER CARE

Sylvester's specialists are available across locations in South Florida, from South Miami-Dade to North Broward, to provide you with convenient access to our expert cancer care.

1 SYLVESTER AT DEERFIELD BEACH
THE PAP CORPS CAMPUS

2 SYLVESTER AT CORAL SPRINGS

3 SYLVESTER AT FT. LAUDERDALE

4 SYLVESTER AT PLANTATION

5 SYLVESTER AT HOLLYWOOD

6 SYLVESTER AT AVENTURA

7 SYLVESTER AT DORAL

8 SYLVESTER COMPREHENSIVE CANCER CENTER - MAIN CAMPUS

9 SYLVESTER AT THE LENNAR FOUNDATION MEDICAL CENTER

10 SYLVESTER AT KENDALL

COMING SOON

11 SYLVESTER AT DORAL EXPANSION

12 SYLVESTER AT SOLÉ MIA

13 SYLVESTER COMPREHENSIVE CANCER CENTER - TRANSFORMATIONAL CANCER RESEARCH BUILDING (TCRB)

SYLVESTER BY THE NUMBERS

ONLY
NCI-DESIGNATED
CANCER CENTER IN SOUTH FLORIDA

25
NEW PHYSICIANS AND PHYSICIAN-SCIENTISTS

2,500+
PHYSICIANS, PHYSICIAN-SCIENTISTS AND SUPPORT STAFF
DEVOTED EXCLUSIVELY TO CANCER CARE AND RESEARCH

2,228
STEM CELL TRANSPLANTS AND T-CELL THERAPIES
COMPLETED SINCE PROGRAM'S INCEPTION

2,961
PATIENTS PARTICIPATING IN 436 CLINICAL STUDIES
(INTERVENTIONAL AND NON-INTERVENTIONAL);
120 NEW TRIALS OPENED IN 2022

10
TREATMENT FACILITIES
ACROSS SOUTH FLORIDA

15
CANCER SITE DISEASE GROUPS

451
CANCER-RELATED, PEER-REVIEWED PUBLICATIONS,
290 WITH OTHER NCI-DESIGNATED CANCER CENTERS

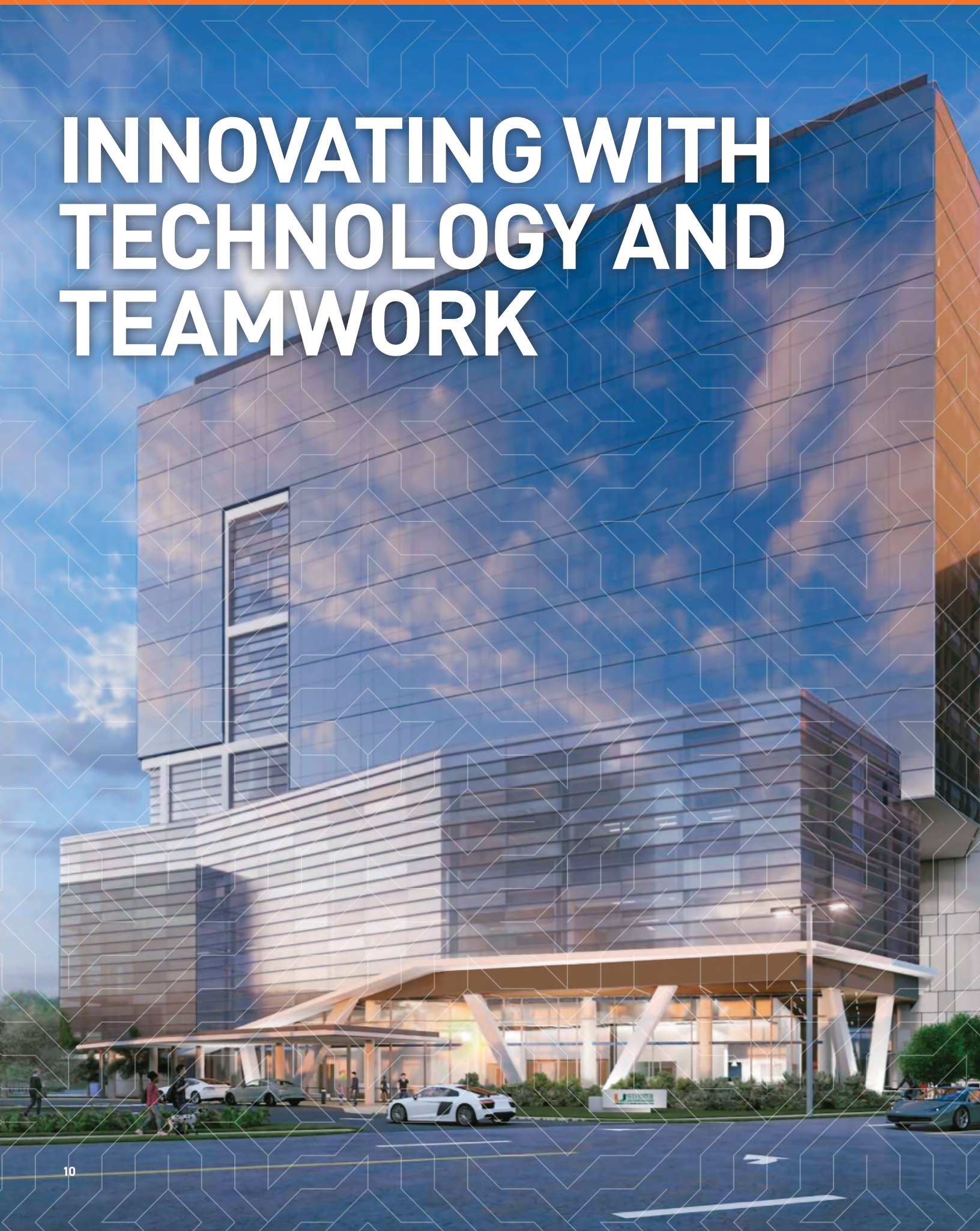
12
CANCER SUPPORT SERVICES
AND **20** CANCER SOCIAL WORK SUPPORT GROUPS

$56M
IN PEER-REVIEWED AND NON-PEER-REVIEWED FUNDING
FOR **458** ACTIVE CANCER PROJECTS

$4.2M
FOR TRAINING GRANTS

481
PATIENTS TREATED WITH PROTON THERAPY
(SINCE THE DWOSKIN PROTON THERAPY CENTER OPENED ON SEPTEMBER 11, 2020)

INNOVATING WITH TECHNOLOGY AND TEAMWORK



INNOVATING WITH TECHNOLOGY AND TEAMWORK

SYLVESTER ANNOUNCES TRANSFORMATIONAL CANCER RESEARCH BUILDING

New facility will house ultramodern patient care and research to improve cancer care and address disparities.

Sylvester Comprehensive Cancer Center is making another bold move to accelerate cancer research, celebrating the groundbreaking for a 244,000-square-foot, state-of-the-art Sylvester Comprehensive Cancer Center - Transformational Cancer Research Building (TCRB).

Slated to open in 2024, the 12-story facility on the University of Miami Miller School of Medicine campus will be a unique hub for cancer research, innovation, wellness and patient-centered care, all under one roof.

"As the only cancer center in South Florida designated by the National Cancer Institute, our mission is to pioneer groundbreaking cancer research, innovate, and advance cancer cures. To fulfill this mission, Sylvester is constructing a premier cancer research facility that will bring hope to patients in South Florida and beyond," said Stephen D. Nimer, M.D., director of Sylvester Comprehensive Cancer Center, executive dean for research at the Miller School and holder of the Oscar de la Renta Endowed Chair in Cancer Research.

The TCRB, being built at 1425 N.W. 10 Ave., will be an ultramodern patient care and research facility to support new and emerging directions in cancer treatment. It will be an iconic building, new to the South Florida skyline, that fosters collaboration and team science, attracting more top-tier researchers to the Sylvester team.

Located in one of the most diverse populations in the U.S., the TCRB will harness its geographical position to work toward eliminating racial, ethnic, cultural and other cancer care disparities.

"It is no small task to commit to both improving cancer care and addressing disparities," said Julio Frenk, M.D., M.P.H., Ph.D., president of the University of Miami. "We have an opportunity in Miami to design cures for different populations and amplify our impact to global communities. The TCRB will enable us to promote health access and equity, which is at the core of our research and clinical care mission as an academic health care system."

Dipen J. Parekh, M.D., chief operating officer for UHealth – University of Miami Health System, executive dean for clinical affairs, and founding director of the Desai Sethi Urology Institute at the Miller School, echoed that thought. "We have a responsibility to focus on the toughest challenges in medicine. This facility will integrate our basic science research and clinical care to help us discover and deliver the newest breakthroughs to our cancer patients."

Dean and Chief Academic Officer of the Miller School Henri R. Ford, M.D., M.H.A., said, "We are continually motivated by a deep desire to have a positive impact on the world and drive meaningful change. It is what we teach our students and how we approach research. This new facility is designed to support our goal to tackle the most challenging cancers."

Wellness and survivorship will be strongly promoted within the building. The new facility will focus on total-body wellness during cancer treatment to improve quality of life. It will set the standard for survivorship programs that prioritize recurrence prevention for the benefit of patients and their families.

The goal, explained Dr. Nimer, is to leverage technology, luminary researchers, and multidisciplinary collaboration to create a central location for cancer care innovation.

"We will harness the power of state-of-the-art equipment and laboratories and the latest network and machine-learning technologies to accelerate the translation of groundbreaking scientific discoveries into lifesaving and practice-changing treatments and therapies for patients in South Florida, and share these transformative results with patients, providers, and cancer centers worldwide," he said.

This new facility will epitomize cancer care's evolution to more personalized and targeted care. "It will expand cancer care to promote wellness and quality of life; there is no better place for that than Sylvester Comprehensive Cancer Center," said Adam E. Carlin, chair of the Sylvester Board of Overseers.

For more information, contact Jesse Rodriguez in Development at Jesse.Rodriguez@miami.edu or 305-243-2014.

SYLVESTER PANCREATIC CANCER RESEARCH INSTITUTE TAKES ON THE TOUGHEST TUMORS

Studies will also focus on diverse racial and ethnic populations to learn how epidemiological and environmental factors influence health disparities.

Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine recently established the Sylvester Pancreatic Cancer Research Institute (SPCRI). The new center will support innovative research, increase collaborations between scientists and clinicians and provide more treatment and clinical trial opportunities for patients.

"The SPCRI will combine Sylvester's clinical strength with world-class research to discover, develop and deliver novel personalized treatments to pancreatic cancer patients," said Stephen D. Nimer, M.D., Sylvester director, executive dean for research at the Miller School and holder of the Oscar de la Renta Endowed Chair in Cancer Research.

"At Sylvester, we have long been ahead of the curve on linking the science to clinical care," said surgical oncologist and founding SPCRI director Nipun Merchant, M.D. "We have created a translational bridge, not just from the laboratory to the patient's bedside, but also taking patients' tumor samples and clinical information back to the laboratory."

SPCRI also provides resources to enhance ongoing cancer research and clinical care. Clinicians and researchers are coalescing to enhance collaborations at the University of Miami, as well as nationally and internationally.

Nipun Merchant, M.D.

The SPCRI goal is to bring clinicians, scientists, patients, advocates and philanthropists together to help patients, explained Sylvester surgical oncologist Jashodeep Datta, M.D.

The team will study South Florida's diverse racial and ethnic populations to understand more about how epidemiological and environmental factors influence the disparities in pancreatic cancer susceptibility and outcomes among distinct groups. This will provide ongoing educational opportunities for researchers and new avenues of investigation.

The clinicians and scientists at SPCRI want to better understand why some patients respond well to treatment while others do not. What are the molecular signatures in tumors that make a treatment more effective? Finding these biomarkers will inform care from the first biopsy, giving oncologists enhanced tools to provide the most precise treatments for each patient. In addition, the team will investigate the tumor microenvironment to find vulnerabilities that will give treatments and immune cells better access to tumors.

We also want to better understand the psychosocial needs of patients and their caregivers," Dr. Merchant said. "Pancreas cancer is one of the most difficult diagnoses. The treatment is long and challenging.

"I'm passionate about the science, but I also see these patients daily," Dr. Merchant said. "I see how challenging this disease is for patients. We need to drive better science to have a real impact on their care. That is what motivates me every day."

SYLVESTER RECEIVES APPROVAL TO BUILD WORLD-CLASS MYELOMA RESEARCH INSTITUTE

A dedicated myeloma institute will help accelerate the speed of Sylvester's research in discovery science, drug development and translational investigations.

Years ago, when C. Ola Landgren, M.D., Ph.D., joined Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine to lead the myeloma program, he told Sylvester's Director Stephen D. Nimer, M.D., that his goal was to establish a "top three" U.S. myeloma program within five years.

With three years to go, Dr. Landgren is on track toward his goal. He recently announced the new, dedicated Myeloma Research Institute within Sylvester, for which he serves as the director. He is also the inaugural leader of the newly launched Translational and Clinical

Oncology Research Program at Sylvester, the Paul J. DiMare Endowed Chair in Immunotherapy at Sylvester and professor of medicine at the Miller School.

Together with Francesco Maura, M.D., co-leader of the Myeloma Genomic Lab at Sylvester and associate director of computational oncology research, and Dickran Kazandjian, M.D., professor of medicine at the Miller School and associate director of clinical trials research at the new institute, Dr. Landgren's team will help accelerate Sylvester's research in discovery science, drug development and translational investigations.

"This institute leverages Drs. Landgren, Maura, and Kazandijan's strengths and fulfills a promise of providing the best cancer care to myeloma patients at Sylvester," said Stephen D. Nimer, M.D., Sylvester director and executive dean for research at the Miller School and holder of the Oscar de la Renta Endowed Chair in Cancer Research.

"We recruited Dr. Landgren, a world leader in myeloma research, for his vision and expertise. He and his colleagues are working collaboratively on developing prevention methods, much-needed therapies, and cures for multiple myeloma," said Dr. Nimer, who is also the executive dean for research at the Miller School.

Myeloma, also called multiple myeloma, is a cancer of plasma cells, which are a type of white blood cell that produces antibodies to protect against infection. However, when this cancer takes hold, the cancer cells grow out of control, crowding out healthy blood cells and producing abnormal proteins.

C. Ola Landgren, M.D., Ph.D.

The American Cancer Society estimates that about 34,470 new cases of myeloma will be diagnosed in the U.S. and 12,640 will die from the cancer in 2022. Florida is among the states with the highest rates of new myeloma diagnoses in the U.S., with 7.9 cases diagnosed in every 100,000 of the state's residents.

Dr. Landgren previously served as chief of myeloma service at Memorial Sloan Kettering Cancer Center in New York, and prior to that as chief of the myeloma program at the National Cancer Institute, National Institutes of Health (NIH) in Bethesda, Maryland. Francesco Maura, M.D., co-leader of the Myeloma Genomic Lab at Sylvester, is associate director of computational oncology research, and Dickran Kazandjian, M.D., professor of medicine at the Miller School, is associate director of clinical trials research at the new institute. The Myeloma Research Institute has produced several high-impact papers and secured invitations to open Phase 1 and Phase 2 clinical trials for promising new drugs — Sylvester is one of only a few centers in the U.S. selected to participate, according to Dr. Landgren.

"We are leading development of blood-based tracking for residual disease," Dr. Landgren said.

The research team has validated its findings with peer-reviewed publications and has secured both philanthropic funding through a grant from the Tow Foundation and federal funding via the NIH. In addition, the center currently has more than 10 early-phase drug trials open and will open another 10 trials in the next 12 to 18 months. There has been an explosion of innovative science and early drug development in multiple myeloma at Sylvester," Dr. Landgren said.

A dedicated myeloma institute will help to accelerate the speed of Sylvester's research in discovery science, drug development, and translational investigations. It will serve as a training

ground for future specialists and leaders in the field of multiple myeloma. The commitment to dedicate an institute to the study of this cancer type will amplify key partnerships, positively influencing philanthropic support, grant awards, and high-impact publications, according to Dr. Landgren.

Among Dr. Landgren's research areas are studies like TRANSFORMM, which is focused on learning how to prevent multiple myeloma from becoming a disease in those at the highest risk. Prevention is key, according to Dr. Landgren, because there are no established curative therapies to treat multiple myeloma, but there could be more options if scientists can eradicate the disease before it takes hold.

"We already know that there are millions of people who have precursor disease for multiple myeloma, but only about 35,000 develop myeloma each year. Right now, we cannot treat millions of people because most would never develop the disease, and we don't yet have screening programs to determine which patients are likely to progress," Dr. Landgren said. "But we are making important discoveries in this area, and I think in the future, if we could identify people who have the precursor and see who is programmed to progress, we could offer treatment and probably eradicate the disease in many cases.

SYLVESTER JOINS FORCES WITH COLLEGE OF ENGINEERING TO CURE CANCER

Collaborative partnership will integrate cancer biology, clinical outcomes and new pathways discovered with engineered therapeutics and diagnostics to advance cancer cures.

Researchers at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine have joined forces with the University of Miami College of Engineering for Engineering Cancer Cures™, to develop and deploy innovative technologies for early detection, diagnosis and treatment of cancer.

Sylvester Director Stephen D. Nimer, M.D., who is also the executive dean for research at the Miller School and holder of the Oscar de la Renta Endowed Chair in Cancer Research joined forces with Dean of Engineering Pratim Biswas, Ph.D., to co-create Engineering Cancer Cures. Shanta Dhar, Ph.D., assistant director for technology and innovation at Sylvester, and Ashutosh Agarwal, Ph.D., associate professor of biomedical engineering are co-leading the partnership.

Engineering Cancer Cures aims to integrate cancer biology, clinical outcomes and new pathways discovered with engineered therapeutics and diagnostics to advance cancer cures, according to Dr. Dhar.

While cancer clinicians know what cancer patients need, engineers help to fulfill those needs by designing innovative therapies, procedures algorithms and more, according to Dr. Agarwal, who is associate director of UM's Biomedical Nanotechnology Institute and a Sylvester member.

Engineering Cancer Cures includes three working groups — Intelligent Materials and Targeting, Cancer Tissue Engineering, and Artificial Intelligence/ Machine Learning/Deep Learning-Based Imaging and Analytics. Initial research projects include looking at how to better reach tumor targets, therapeutic cell engineering, artificial intelligence (AI) in cancer imaging and many others.

Dr. Agarwal, who is co-leading the initiative's Cancer Tissue Engineering working group with Jashodeep Datta, M.D., assistant professor of gastrointestinal surgical oncology, said they will focus on such things as the possible transition from classic therapies that can be taken or infused, such as chemotherapies, to treatment that involves placement of living tissue or cells in cancer patients

Engineering Cancer Cures will accelerate collaborative discoveries otherwise siloed in the cancer biology and engineering disciplines, according to Dr. Datta.

From their research, large datasets will help identify predictive models to refine care and the use of drug therapies for diverse patients such as those who are Black or Hispanic.

In the Artificial Intelligence/Machine Learning/Deep Learning-Based Imaging and Analytics working group, a team of clinicians and mathematicians are integrating and analyzing large datasets from genomic sequencing, tissue pathology, and radiologic tissue imaging.

A member of Engineering Cancer Cures™ shows Sylvester Director Stephen D. Nimer, M.D., one of the innovative technologies they are working to help tackle cancer.

"Here at Sylvester and at the University of Miami medical system, we are generating a lot of data in research and patient care," said Stephan Schürer, Ph.D., a professor of pharmacology at the Miller School, who is co-leading the group with Mohamed Abdel-Mottaleb, Ph.D., professor and chair of the Department of Electrical and Computer Engineering. "It is critically important to be able to use the data to develop predictive models."

The collaboration with engineering will result in infrastructures that allow optimal use of the data and development of novel solutions for patients and the health system, according to Dr. Schürer, who leads the Cancer Science Initiative and is director of digital drug discovery at UM's Institute for Data Science and Computing.

While other respected U.S. cancer centers encourage collaboration between cancer center and engineering scientists, Sylvester stands out for its access to a diverse local population of cancer patients, according to Dr. Agarwal.

"This gives us a strategic advantage because we know that drugs and therapies approved in studies with predominately White patients might not work in Black or Hispanic patients, for example. It is very important to capture those racial differences," Dr. Agarwal said.

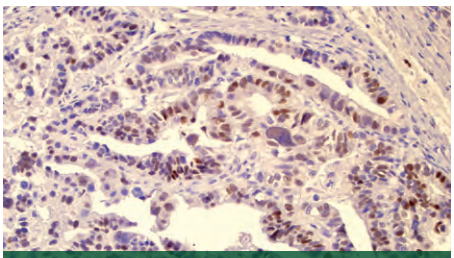
DRIVING RESEARCH FOR PATIENTS

SYLVESTER RESEARCHERS RECEIVE $9.5 MILLION GRANT TO STUDY ESOPHAGEAL CANCER

Researchers to investigate esophageal adenocarcinoma (EAC), the most common form of esophageal cancer in the United States.

Researchers at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine have received a $9.5 million National Cancer Institute Program Project (P01) grant to investigate esophageal adenocarcinoma (EAC).

"People with chronic gastroesophageal reflux disease, known as GERD, can develop a precancerous condition called Barrett's esophagus," said Wael El-Rifai, M.D., Ph.D., associate director of basic science at Sylvester, co-leader of the Tumor Biology Research Program, and principal investigator on the grant. "The cells in the esophagus adapt to protect themselves from the acid, and that increases the risk of developing esophageal cancer."



The team will focus on how esophageal cells remodel themselves in response to GERD, becoming more vulnerable to cancer-causing mutations.

"This grant is a testament to the impactful research already underway at Sylvester that is paving the way in providing patients with the best care today, and I am confident the team, under Dr. El-Rifai, will make great progress," said Stephen D. Nimer, M.D., director of Sylvester. "With these resources, our researchers can learn more about this disease and create better tools to continuously improve patient care."

While only around 2% to 3% of patients progress from Barrett's esophagus to EAC during their lifetimes, these cancers have a dismal, 15% five-year survival rate. In the past 30 years, EAC prevalence has increased 600%.

"We are beginning to understand how esophageal cells adapt to GERD's acidic environment and how those changes can lead to Barrett's esophagus and eventually cancer," said Dr. El-Rifai. "Now, we have to find better ways to intervene. More than 18,000 people in the U.S. die from EAC each year — we need to do better."

NCI TO FUND SYLVESTER-LED STUDY ON HOW EXERCISE AND NUTRITION MAY IMPROVE OVARIAN CANCER OUTCOMES

It is one of four grants awarded nationally by the NCI through its Exercise and Nutrition Interventions to Improve Cancer Treatment-Related Outcomes (ENICTO) in Cancer Survivors Consortium.

Tracy Crane, Ph.D., R.D.N.

The National Cancer Institute (NCI) has awarded $7 million for research led by Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine and Yale Cancer Center, to study the impact of nutrition and exercise on ovarian cancer outcomes on underrepresented women who are Black and Hispanic in South Florida.

"Historically, there has not been an emphasis on studying the use of exercise and healthy eating during cancer treatment. The focus on lifestyle behaviors has predominantly been in the post-treatment phase, and how to use healthy diets and exercise to prevent cancer from coming back," said the study's co-principal investigator Tracy Crane, Ph.D., R.D.N., director of lifestyle medicine and digital health in cancer survivorship and co-leader of the Sylvester's Cancer Control Research Program. "This is the first time the NCI has made a concerted effort, with dedicated resources to better understand the role of exercise and nutrition in

improving treatment outcomes, and our study will help to build this evidence. The fact that the NCI has recognized Sylvester and its diverse catchment area as a key player in answering this question is huge."

Sylvester Comprehensive Cancer Center and Yale Cancer Center are leading the research. Each center will recruit 100 newly diagnosed ovarian cancer patients scheduled to receive treatment, including surgery and chemotherapy. Patients will be randomly assigned either to a medical nutrition therapy and exercise intervention that Dr. Crane helped to develop and studied, or to an attention control condition.

The intervention will be tailored to each patient and will evaluate whether the intervention improves their ability to tolerate and complete treatment. It will be conducted in Spanish and English.

Frank J. Penedo, Ph.D.

The principal researchers on the project, which is supported by a five-year grant from the National Cancer Institute and other agencies, are Frank J. Penedo, Ph.D., associate director of Cancer Survivorship and Translational Behavioral Sciences and director of Cancer Survivorship and Supportive Care at Sylvester Comprehensive Cancer Center, and Teresa L. Lesiuk, Ph.D., MT-BC, director and associate professor of music therapy at the Frost School.

Drs. Penedo and Lesiuk are working to identify specific music therapy techniques that help cancer patients and survivors. A critical tool is mindfulness-based music therapy (MBMT) applied by trained music therapists.

Several factors relating to cancer patients and survivors will be considered, such as how listening to favorite types of music or playing an instrument (even for beginners) can "settle down" the effects of chemotherapy. They will also examine how music and attitudes of mindfulness can reduce distress and symptoms associated with cancer treatments, such as fatigue.

RESEARCHERS AT SYLVESTER, FROST SCHOOL RECEIVE $2.6M FEDERAL GRANT TO STUDY MINDFULNESS AND MUSIC THERAPY

The project will examine how music therapy techniques affect symptoms and quality of life in cancer patients and survivors.

Researchers with Sylvester Comprehensive Cancer Center, part of the University of Miami Miller School of Medicine, and the University's Frost School of Music are using a $2.6 million federal grant to study how mindfulness and music therapy can alleviate stress, anxiety, and depression, reduce treatment-related symptoms, and improve quality of life for cancer patients and survivors.

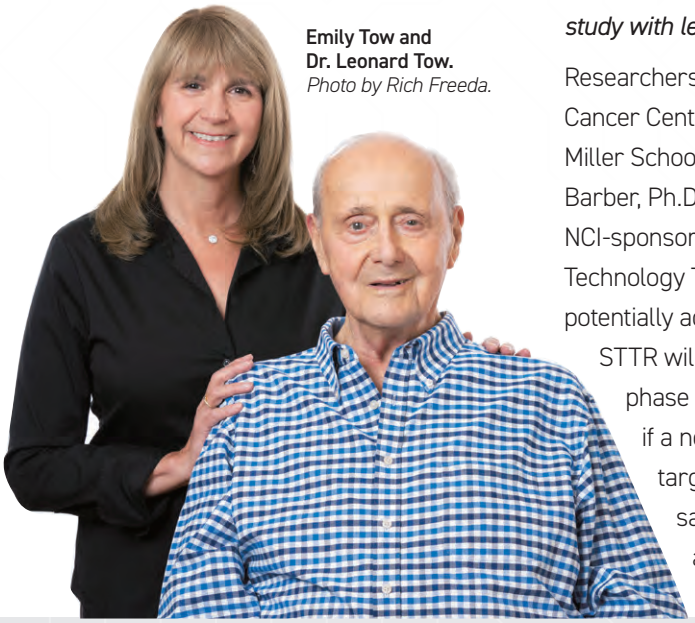
TOW FOUNDATION COMMITS $2 MILLION TO MULTIPLE MYELOMA RESEARCH AT SYLVESTER

The donation is a testament to the work of C. Ola Landgren, M.D., Ph.D., a world-renowned hematologic oncologist.

The Tow Foundation has committed $2 million to support multiple myeloma research at Sylvester Comprehensive Cancer Center, a part of UHealth – University of Miami Health System, and in particular, the work of C. Ola Landgren, M.D., Ph.D., a world-renowned hematologic oncologist.

"This donation is a testament to the extraordinary vision, leadership and expertise of Dr. Landgren and the entire myeloma team here at Sylvester," said Stephen D. Nimer, M.D., director of Sylvester.

This donation is the first of its kind for the foundation, as philanthropic efforts, up to now, were focused in New York and Connecticut, where it is based. The decision to support a cancer institution outside of this region was based on the foundation's confidence in Dr. Landgren.



Emily Tow and Dr. Leonard Tow. *Photo by Rich Freeda.*

The relationship began several years ago, when Leonard Tow, Ph.D., founder of the Tow Foundation, met Dr. Landgren when he was a faculty leader at Memorial Sloan Kettering in New York. "I've met many rather esteemed scientists, but his style was completely different," said Dr. Tow. "Dr. Landgren does not accept anything less than success, and I don't doubt for a moment that he's on the trail to accomplish something with this multiple myeloma research."

Dr. Tow and his wife, Claire, established the Tow Foundation in 1988, to fund projects that offer transformative experiences to individuals and create collaborative ventures in fields where they see opportunities for breakthroughs, reform and benefits for underserved populations.

SYLVESTER RESEARCHERS RECEIVE $2M TO CONDUCT CLINICAL TRIAL ON UNIQUE IMMUNOTHERAPY

The NCI-sponsored Small Business Technology Transfer (STTR) grant will fund a first-in-humans, phase 1 clinical study with leukemia patients.

Researchers at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, led by Glen Barber, Ph.D., are leveraging a $2 million, NCI-sponsored Small Business Technology Transfer (STTR) grant to potentially advance cancer care. The STTR will fund a first-in-humans, phase 1 clinical study to determine if a novel immunotherapy, targeting the STING pathway, is safe and can proceed to more advanced trials.

"We believe this approach has tremendous potential for the future treatment of many different cancers," Glen Barber, Ph.D., said.

"We've developed a simple and inexpensive way to potentially stimulate the STING pathway and generate a robust anti-tumor immune response," said Dr. Barber, who is the Eugenia J. Dodson Chair in Cancer Research at Sylvester and professor and chair of the Miller School's Department of Cell Biology. "We believe this approach has tremendous potential for the future treatment of many different cancers." As part of the cell's innate immune response, STING detects DNA in the cytoplasm of cells, which often indicates a bacterial or viral infection, and alerts the immune system to the intruder.

STING also plays a major anti-cancer role. For example, DNA damage in tumor cells can lead to extra chromosomal DNA (ecDNA) escaping from the nucleus, which can also activate STING and alert the immune system. This includes phagocyte recruitment to remove infected or damaged cells.

If successful, STING immunotherapy could benefit many cancer patients. Current immunotherapies are extremely expensive ($500K for CAR-T) and not always effective. However, the synthetic, STING-activating DNA is quite inexpensive and could be broadly effective against multiple cancer types.

$1.8 MILLION NIH GRANT SUPPORTS HEAD AND NECK CANCER RESEARCH

Sylvester Comprehensive Cancer Center researchers to study the epigenetic mechanisms that drive these cancers.


Lluis Morey, Ph.D.

Sylvester Comprehensive Cancer Center researchers Lluis Morey, Ph.D., and Ramiro Verdun, Ph.D., have received a $1.8 million NIH R01 grant to study the epigenetic mechanisms that drive head and neck cancers.

"Around 20% of patients who have head and neck cancer have mutations in the protein histone H3 or the epigenetic enzyme NSD1," said Dr. Morey, assistant professor in the Dr. John T. Macdonald Foundation Department of Human Genetics at the University of Miami Miller School of Medicine. "Very little is known about how these mutations affect them. We want to understand how mutations in these genes impact head and neck cancer progression, and potentially find therapeutic targets."

At present, head and neck cancer patients receive chemotherapy, but there are no targeted therapies currently approved for them. The researchers believe that some of these patients might respond to PARP inhibitors, which are presently approved to treat ovarian, prostate and other cancers.

Because these drugs have already been proven safe in previous clinical trials, it's possible they could be fast-tracked for head and neck cancers if the evidence warrants it.

"We think we may have found a new way to treat a significant number of head and neck cancer patients," said Dr. Morey. "However, first we must do the research to delineate these mechanisms and understand how these epigenetic changes affect cancer patients."

SYLVESTER RESEARCHERS RECEIVE $1.7 MILLION NIH GRANT TO STUDY EPIGENETIC MECHANISMS IN ER+ BREAST CANCER

The team will study polycomb repressive complexes (PcGs), which play major and often conflicting roles in early development and cancer.


Dr. Morey's team will investigate treatment resistance in estrogen receptor positive breast cancer.

A team led by Lluis Morey, Ph.D., has received a five-year, $1.7 million grant from the National Institute of General Medical Sciences (NIGMS) to investigate treatment resistance in estrogen receptor positive (ER+) breast cancer. Specifically, the group will study polycomb repressive complexes (PcGs), which play major and often conflicting roles in early development and cancer.

"Patients who develop resistance to endocrine therapies, which are commonly used to treat ER+ breast cancer, often overexpress polycomb-encoding genes," said Dr. Lluis Morey, Sylvester Comprehensive Cancer Center researcher and assistant professor of human genetics at the University of Miami Miller School of Medicine. "We need to better understand how PcGs regulate the genes and signaling pathways that confer this resistance."

While the NIGMS grant is not intended to fund drug discovery, Dr. Morey believes this work has great potential to identify therapeutic targets that translational scientists and drug companies can pursue. These findings may also support better care for a variety of patients, as polycomb complexes have been implicated in a variety of cancers.

NEW RESEARCH HIGHLIGHTS RACIAL DISPARITIES IN GENOMIC PROFILING

Inadequate genomic data on Black women with metastatic breast cancer reduces access to targeted therapies.

A new study by researchers at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine has found that Black women with metastatic breast cancer were less likely to have tumors with treatable genetic variations than white and Asian women. The paper, the largest to study racial differences in breast cancer genomic profiling, was published in JAMA Network Open.

Neha Goel, M.D.

"We know that minority populations have historically been less likely to be enrolled in genomic studies," said surgical oncologist Neha Goel, M.D., first author of the paper. "We wanted to see if having fewer of these women in these studies creates a disparity in how we practice precision medicine. In this case, it definitely does."

To examine the problem, Dr. Goel and colleagues analyzed data from the AACR Project Genie Consortium, one of the largest and most diverse genomic databases. The team looked at 6,652 patients with primary or metastatic breast cancer.

They found that Black patients with metastatic cancer had fewer actionable mutations. One example is PIK3CA, an enzyme that is commonly mutated in breast cancer, driving tumor growth. Clinical trials have shown that one PIK3CA inhibitor (alpelisib) improves progression-free survival. However, this drug is less likely to be offered to Black women because the population has fewer PIK3CA mutations, and currently there is no alternative.

"Since genomic studies have historically underrepresented Black and other non-white breast cancer patients, we need to do more to increase minority enrollment," said Dr. Goel. "By making next-generation sequencing studies of primary and metastatic breast cancer more diverse, we identify actionable mutations that are unique to these populations, and we can begin the long process of developing targeted therapies for them."

PARTNERSHIP TO IDENTIFY NOVEL GENETIC DRIVERS OF CANCER DISPARITIES IN AFRICAN ANCESTRY POPULATIONS

Sylvester and Fox Chase Cancer Center Collaborate with Pfizer's Institute of Translational Equitable Medicine to study cancer patients from the U.S., Caribbean and Africa.

Sylvester Comprehensive Cancer Center and Fox Chase Cancer Center announced a collaboration today with Pfizer's Institute of Translational Equitable Medicine (ITEM) to launch a cancer genomics study to characterize novel genetic, molecular and social determinants of cancer across populations of African ancestry.

"People of African ancestry disproportionately develop aggressive, high-grade cancers, particularly in breast and prostate tissues, and the underlying driving factors are not well understood," said Sophia George, Ph.D., associate director of diversity, equity, and inclusion at Sylvester Comprehensive Cancer Center, part of UHealth – University of Miami Health System, and co-leader of the African Caribbean Cancer Consortium (AC3) Women's Cancer Working Group. Despite a high unmet need, there are a limited number of research studies statistically powered to investigate cancer risk and outcomes in people of African ancestry.

In order to address these knowledge gaps, this collaboration will build a clinical genomic registry of biological specimens accompanied by epidemiological, behavioral, and clinical data from African ancestry patients diagnosed with breast and prostate cancer. Leveraging the AC3 network's global reach, the team will recruit patients from ethnically, geographically, and socioeconomically diverse subpopulations across the African diaspora: U.S.-born and immigrant Black patients residing in the United States; patients from moderate and low-income countries in the Caribbean islands; and patients from western, eastern, and southern countries in the African subcontinent.

Sophia George, Ph.D. (left).

OUR PHASE 1 CLINICAL TRIALS

Sylvester Comprehensive Cancer Center has the only academic phase 1 clinical trials program in South Florida.

Before a new cancer treatment can be approved and become part of standard treatment, it must go through three different levels of evaluation called "phases." The goal of phase 1 clinical trials is to determine the safety, early evidence, and efficacy of new treatments in patients with cancer. Phase 1 trials may help develop more treatment choices and most importantly, give hope, for hematology/oncology patients.

Phase 1 trials normally involve a small number of patients who are closely monitored by our research team. Each trial has its own risks and benefits. Participants can choose to quit a clinical trial at any time but should consult with their doctor first.

These are some of the questions that can help a potential participant decide if they will join a clinical trial at Sylvester Comprehensive Cancer Center:

- **Why is this trial being done?**
- **How long will I be in the trial?**
- **What are the possible side effects of the experimental treatment?**
- **What are some possible benefits?**
- **How will we know if the treatment is working?**
- **Will my insurance cover any costs?**
- **How could this trial affect my daily life?**
- **Will I have to travel long distances to be a part of this study?**
- **What are my other treatment options?**
- **We carefully screen all potential participants to determine if they are eligible for the study. This is done to be sure the study is safe for you.**

The research team at Sylvester is committed to finding a cure for cancer. We are both thankful for and honored by all the courageous patients who allow us to be a part of their care.

INVESTIGATOR-INITIATED TRIALS (IIT)

Sylvester researchers are physician-scientists who work toward personalized treatment.

Investigator-initiated clinical trials enable our physician-scientists to provide that tailored, relevant research. In the clinic, physicians observe firsthand the specific characteristics of their patients' disease. These observations open new avenues of research into challenging diseases, especially the development of new trials that may be better suited to our patients than most ongoing trials, which are often led by large industry sponsors and designed with the "average" patient in mind. Ideally, this level of personalization will lead to better outcomes.

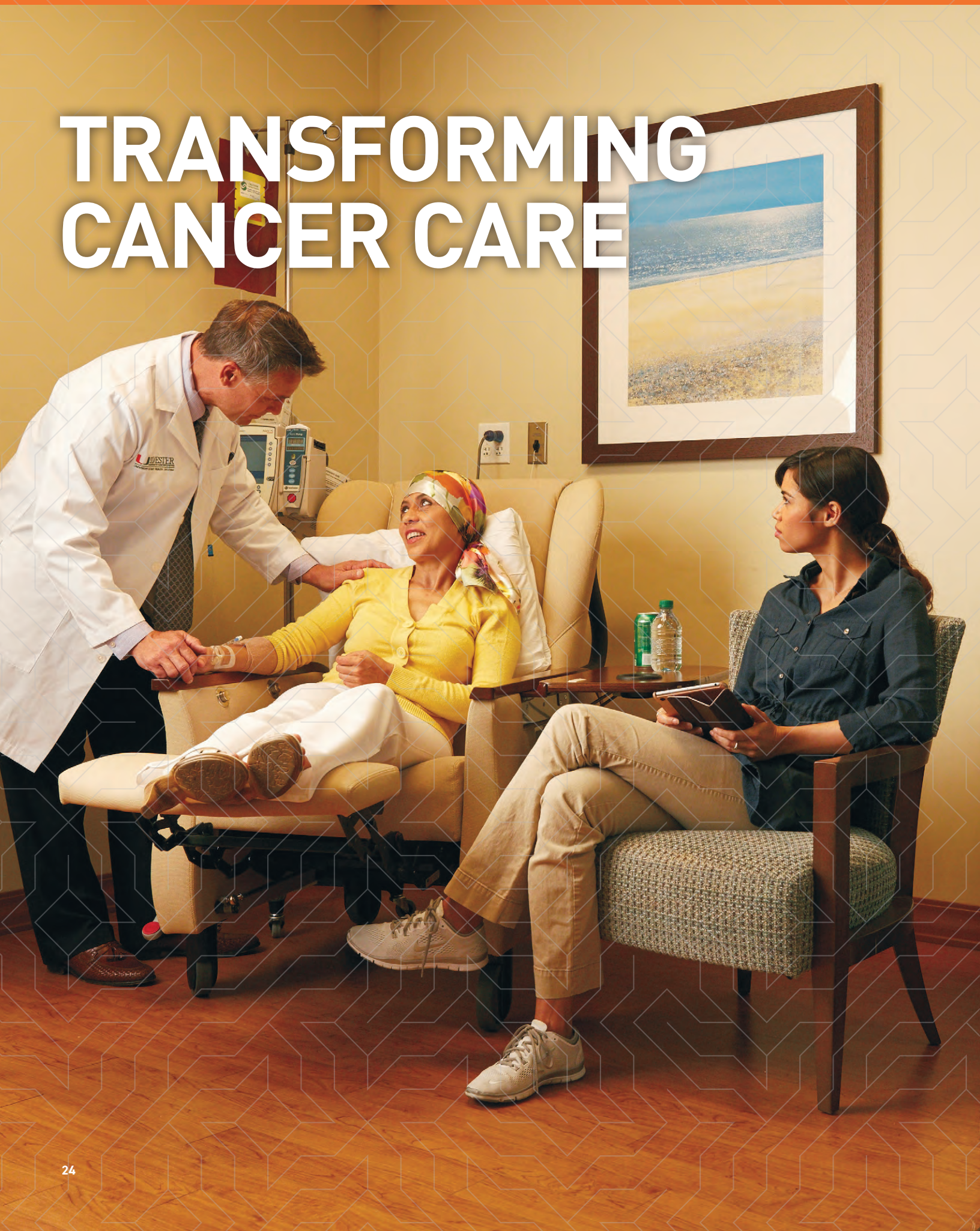
THE LIFESTYLE INTERVENTION OF FOOD AND EXERCISE FOR LYMPHOMA – THE LIFE-L STUDY

Sylvester launches a course of study for the first time.

In 2022, we opened the Lifestyle Intervention of Food and Exercise for Lymphoma — or the LIFE-L Study to better understand the potential impact of lifestyle factors, such as diet and exercise, on symptoms and side effects in lymphoma patients. This research has never been done in patients with lymphoma.

In other cancer types (breast and colorectal) lifestyle factors have been shown to mediate symptoms and side effects, leading to improvements in treatment completion and quality of life. We are trying to determine the feasibility and acceptability of the Mediterranean diet and exercise intervention on lymphoma therapy in untreated patients requiring chemotherapy and to see if the intervention can maintain the relative dose intensity (RDI) of the chemotherapy, as well as assess cognitive function, depression, fatigue, changes in body composition and metabolic and inflammatory markers over the course of treatment.

TRANSFORMING CANCER CARE



Erin Kobetz, Ph.D., M.P.H., Sylvester's associate director of population science and cancer disparities and the University's vice provost for research and scholarship.

SYLVESTER PARTNERS WITH PAHO/WHO TO TRAIN CARIBBEAN CLINICIANS IN MAMMOGRAPHY QUALITY ASSURANCE

Event aims to increase the capacity for screening among women in the region and impact higher breast cancer death rate.

In partnership with the Pan American Health Organization (PAHO), the World Health Organization's regional office for the Americas, and the University of Texas MD Anderson Cancer Center, Sylvester hosted the "Improving Mammogram Quality Seminar," which educated radiologists and technologists from throughout the Caribbean in the latest in screening mammography techniques, protocols, technologies, quality assurance and more.

The WHO recognized Sylvester at the University of Miami Miller School of Medicine as a collaborating center for cervical cancer elimination in late 2021, entrusting the cancer center to provide a leading role in its worldwide effort to eliminate the preventable disease.

While the recent breast cancer training seminar was not directly related to the cervical cancer collaboration with the WHO, it reflects the confidence that the WHO and PAHO have in Sylvester as a trusted partner in the elimination of cancer disparities, including in breast cancer.

Women in the Caribbean have a higher death rate from breast cancer than women in North America and European countries, according to the WHO. This is partly because the cancer is often detected at later stages when it is less treatable.

"We are honored to work so closely with PAHO/WHO and MD Anderson on increasing capacity for breast cancer screening across Latin America and the Caribbean," said Erin Kobetz, Ph.D., M.P.H., associate director of population science and cancer disparities at Sylvester. "As a National Cancer Institute-designated cancer center, Sylvester plays a critical role in ensuring that best practices for cancer prevention, early detection, and treatment translate to our partners globally."

SYLVESTER RECTAL CANCER PROGRAM RECEIVES ELITE NAPRC ACCREDITATION FROM AMERICAN COLLEGE OF SURGEONS

It is one of only around 50 in the country, and the first in Miami, to gain this recognition.

Sylvester Comprehensive Cancer Center's Rectal Cancer Program has earned a three-year accreditation from the American College of Surgeons' National Accreditation Program for Rectal Cancer (NAPRC). It is one of only around 50 in the country, and the first in Miami, to gain this recognition.

"This accreditation puts us in an elite subset of colorectal cancer programs in the country," said Assistant Professor of Surgery Luanne Force, M.D., who helped spearhead efforts to gain the NAPRC accreditation. "It also acknowledges our strong multidisciplinary team of surgeons, radiation oncologists, medical oncologists, radiologists and pathologists."

To achieve NAPRC accreditation, programs must adopt NAPRC standards on program management, clinical services, and quality improvement, and establish a multidisciplinary care team.

While most of the NAPRC requirements were already in place at Sylvester, the team had to reorganize how care was being provided. Dr. Force and many others spent four years working on this accreditation – creating a dedicated rectal cancer tumor board, hiring a coordinator, and developing standardized diagnostic approaches to ensure that all patients receive the highest quality care.

"The group came up with a robust treatment algorithm for rectal cancer," said Dr. Force. "In addition, all patients are now presented at the tumor board. The team has really come together to get this done, and it's been incredible to see how the program has evolved."

The accreditation means the rectal cancer program adheres to the highest quality standards and is providing the most advanced, evidence-based care.

THE LANCET PUBLISHES SYLVESTER-LED STUDY DEFINING NEW STANDARD OF CARE FOR PROSTATE CANCER RECURRENCE AFTER PROSTATECTOMY

Adding short-term hormone therapy and pelvic lymph node radiotherapy to the standard of care benefits patients.

Adding short-term hormone therapy and pelvic lymph node radiotherapy to standard-of-care prostatectomy surgical bed treatment benefits prostate cancer patients whose prostate-specific antigen (PSA) levels are rising post-prostatectomy, according to an international study led by Alan Pollack, M.D., Ph.D., chair and professor of radiation oncology at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, and published in *The Lancet*.

"An increasing PSA after prostatectomy for prostate cancer is a hallmark of recurrence, which occurs on average in over 50% of patients with adverse surgical pathologic findings. The PSA indicates that the cancer has returned,

Alan Pollack, M.D., Ph.D., led the study, which included patients in the U.S., Canada, and Israel.

but not where it is coming from," according to Dr. Pollack.

The National Cancer Institute-funded SPPORT trial was a study of men from 283 radiation oncology cancer treatment centers in the U.S. (including Sylvester), Canada and Israel, who despite having had a prostatectomy, had PSAs of between 0.1 and <2.0 ng/mL. The men were randomly selected for prostate bed radiotherapy only; prostate bed plus four to six months of hormone therapy, also known as androgen deprivation therapy; or the two therapies with the addition of pelvic lymph node radiotherapy.

The investigators focused on five-year freedom from the progression of prostate cancer as their primary outcome from the different treatment arms. They found that there was an incremental benefit with each level of treatment intensification.

The most intense treatment, which included the pelvic lymph nodes and androgen deprivation therapy, was significantly better than the other treatments. In an unplanned subgroup analysis based on the level of PSA on protocol entry, all patients — regardless of whether their PSAs were low or high — notably benefited from the addition of androgen deprivation therapy.

In the trial, five-year freedom from progression was 70.9% in the group that received prostate bed radiotherapy only, versus 81.3% among those who also received androgen deprivation therapy.

Adding pelvic lymph node treatment also resulted in a notable patient benefit to 87.4%, but that benefit was greatest for those who had higher PSAs at protocol entry.

SYLVESTER PLAYS PIVOTAL ROLE IN PRACTICE-CHANGING ANAL CANCER PREVENTION STUDY PUBLISHED BY NEJM

ANCHOR study is likely to establish a new standard of care for people living with HIV.

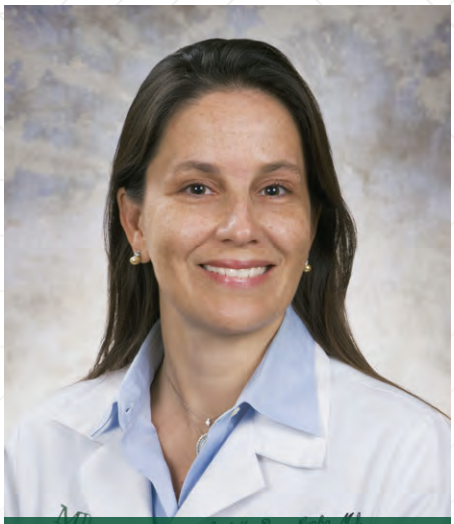
Findings from the ANCHOR study that has screened 10,723 people living with HIV (PLHIV) and enrolled 4,446 from 25 U.S. sites, including Sylvester and Jackson Memorial Hospital, show that treating anal high-grade squamous intraepithelial lesions (HSIL), which are potentially precancerous, significantly lowers the risk of anal cancer compared to taking a wait-and-see approach.

The risk of anal cancer is higher among PLHIV than in the general population. And anal cancer is biologically similar to cervical cancer in the sense that both are caused by HPV and preceded by HSIL, according to Isabella Rosa-Cunha, M.D., principal investigator of the ANCHOR study sites at Sylvester and Jackson Memorial Hospital and associate professor of medicine at the Miller School.

Investigators studied PLHIV 35 years and older with biopsies showing that they had anal HSIL. Subjects were randomized to either a treatment group, in which their lesions were treated mainly with electrocauterization, or an active monitoring group, without treatment.

During the study, nine cases of anal cancer were diagnosed among the 2,227 treated participants, compared with 21 cases of cancer among the 2,219 participants in the active monitoring group. The incidence of anal cancer was about 60% lower in the treatment arm, which is a significant finding.

This study will likely improve anal cancer prevention in other high-risk groups, including HIV-negative men who have sex with men, transplant patients, and women with HPV vulvar disease, according to Dr. Rosa-Cunha. The National Cancer Institute, which funded the study, has approved the study to continue to follow these patients until 2025.



Isabella Rosa-Cunha, M.D., principal investigator of the ANCHOR study sites at Sylvester and Jackson Memorial Hospital and associate professor of medicine at the Miller School.

Donald Weed, M.D. (left).

DR. DONALD T. WEED WORKS TO BRIDGE GLOBAL DISPARITIES IN HEAD AND NECK SURGERY, FROM HAITI TO AFRICA

Training surgeons is what will provide a longer-lasting benefit for all.

As a moderator during the April 23 virtual global symposium, "Bridging Continental Divides: Challenges and Opportunities in Head Neck Oncology Practice in Low Resource Settings," Donald T. Weed, M.D., and colleagues in the American Head and Neck Society explored issues related to the challenges faced by head and neck surgeons in low-resource settings from Haiti to the African continent.

The symposium revealed that Haiti, Uganda, Ghana and Senegal all have common obstacles, such as limited access to operating room time, and challenges unique to each country's availability of critical resources and infrastructure, according to Dr. Weed.

And it's work that starts with attempting to address the specific needs of the surgeons in a low-resource setting, and then helping to meet those needs," he said. "Obviously, patient care is an integral part of that and certainly a benefit of that, but the training of the surgeons and other health care providers is what will provide a longer lasting benefit for all."

Since 2015, Dr. Weed has traveled one to three times annually to Haiti and a group of healthcare providers from the University of Miami and Thomas Jefferson University to provide extensive training for Patrick Jean Gilles, M.D., a head and neck surgeon, who treats patients and runs the otolaryngology residency program at the Universite d'Etat d'Haiti.

> Obviously, patient care is an integral part of that and certainly a benefit of that, but the training of the surgeons and other health care providers is what will provide a longer lasting benefit for all.
>
> **Donald T. Weed, M.D.**

INVESTING IN OUR PEOPLE FOR THE FUTURE

PAVING THE PATH TO GREATNESS: A DECADE OF TRANSFORMATION AND COMMITMENT TO EXCELLENCE CELEBRATION HONORS DR. DIPEN J. PAREKH AND DR. STEPHEN D. NIMER

Trustees host event acknowledging leaders' accomplishments.

(From left) Dipen J. Parekh, M.D., Stuart Miller, President Julio Frenk, and Stephen D. Nimer, M.D.

Over the past 10 years, UHealth – University of Miami Health System and Sylvester Comprehensive Cancer Center have established themselves as South Florida's premier health care providers, largely due to the thoughtful leadership and unbridled passion of Dipen J. Parekh, M.D., chief operating officer of UHealth, and Stephen D. Nimer, M.D., director of Sylvester.

In recognition of their 10-year anniversaries, UHealth leaders and supporters gathered to honor the two remarkable men.

Stuart Miller, chair of the UHealth Board of Directors and member of the University of Miami Board of Trustees, hosted the celebration of Drs. Parekh and Nimer's numerous accomplishments over the past decade, along with their shared vision which has paved a path to greatness for Sylvester and UHealth.

Miller called Dr. Nimer an extraordinaire caregiver and recognized the critical role Dr. Nimer played in helping Sylvester earn the prestigious National Cancer Institute designation and achieve a top 50 Best Hospitals for Cancer ranking from *U.S. News & World Report*. Tribute was also paid to Dr. Nimer's leadership behind the Transformational Cancer Research Building, a 12-story, 244,000-square-foot, state-of-the-art facility that will double the research footprint of Sylvester once it opens in 2024.

"Stephen is elevating our entire research mission at the UHealth system," said Miller. "When Stephen touches something and gets involved, you can rest assured that important things are going to happen."

In recognizing his role in elevating Sylvester Comprehensive Cancer Center to national prominence, Dr. Nimer spoke of the importance of building something of value, a lesson his late father taught him when he was a child.

"I feel so proud to say that we have built a cancer center we can all be proud of," said Dr. Nimer, who also serves as executive dean of research at the Leonard M. Miller School of Medicine and holds the Oscar de la Renta Endowed Chair in Cancer Research. "In the next phase of our journey, we will continue to build something of great value for our community, state, and our nation. Something for future generations, for our children and their friends and neighbors, who will thrive based on what we have built, together."

During his address, University of Miami President Julio Frenk reflected on Drs. Parekh and Nimer's many laurels, and personally thanked them for their leadership in helping the University navigate the largest and most daunting health crisis in a century.

"Stephen and Dipen don't just excel in what they do, they also go way beyond the confines of their job descriptions. As upstanding professionals, they are at the top of their game, but they also serve the University in a comprehensive way," said Dr. Frenk. "On behalf of the entire University of Miami community, thank you for 10 years of brilliance, excellence and inspiration."

INVESTING IN OUR PEOPLE FOR THE FUTURE

DR. ANTONIO IAVARONE JOINS SYLVESTER AS NEW DEPUTY DIRECTOR

In his new role, he aims to pave the way from research to clinical care.

Antonio Iavarone, M.D.

Antonio Iavarone, M.D., has made a decades-long commitment to finding better treatments for glioblastoma and other aggressive brain tumors. As the new deputy director of Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, he will have opportunities to do even more.

"We are incredibly pleased that Dr. Iavarone has joined our leadership team at Sylvester," said Stephen D. Nimer, M.D., director of Sylvester, Oscar de la Renta Endowed Chair in Cancer Research, and executive dean for research at the Miller School. "He has been a leader in brain tumor research for more than 20 years and will bring many novel insights to our cancer center."

A pediatric oncologist by training, Dr. Iavarone spent the last 20 years at Columbia University, where he was a professor of neurology and pathology and cell biology. There, he made several important breakthroughs, such as identifying a novel genetic abnormality, the FGFR3-TACC3 fusion gene, in patients with glioblastoma. As yet, his achievements have not translated into improved patient outcomes, but his work can change the way these tumors are treated.

Dr. Iavarone is both passionate about the scientific insights that come from research conducted by him and his colleagues and frustrated by the lack of meaningful clinical progress in the field. He believes that by harnessing Sylvester's clinical and research acumen, he can help change the clinical trajectory for many brain tumor patients.

"I came to Sylvester because I want to give patients better tools to fight their disease," he said. "While we may need to invent brand-new approaches, much can still be learned from work that is currently being conducted in research labs around the world. We must now translate those findings from the lab to the clinic."

"Dr. Iavarone and his team are tackling these challenging cancers with molecular analyses that will help create tailored, personalized treatments," said Henri R. Ford, M.D., M.H.A., dean and chief academic officer of the Miller School. "We see great potential to move the needle and improve patient outcomes."

DR. ALBERTO CABAN-MARTINEZ JOINS PRESTIGIOUS OCCUPATIONAL AND ENVIRONMENTAL HEALTH ORGANIZATION

He will collaborate with researchers worldwide.

Alberto Caban-Martinez, Ph.D., D.O., M.P.H., has been inducted as a fellow in the Collegium Ramazzini, a prestigious international scientific organization focused on occupational and environmental disease prevention. As a fellow, Dr. Caban-Martinez, deputy director of Sylvester Comprehensive Cancer Center's Firefighter Cancer Initiative, joins eminent physicians and scientists from around the world to advance occupational and environmental health.

"This induction as fellow has been a humbling and invigorating experience," he said. "There are so many opportunities to protect people at their place of work, and sometimes it takes years of research to figure out what to actually do. The physicians and scientists in the collegium are world leaders in occupational and environmental health, and I feel honored to just be around them."

Alberto Caban-Martinez, Ph.D., D.O., M.P.H.

Dr. Caban-Martinez's induction into the Collegium Ramazzini will provide new opportunities to share Sylvester's firefighter cancer research and learn from other occupational medicine physicians and scientists. Each year, the organization holds a Ramazzini Days symposium, which showcases research from around the world. The organization is named after Dr. Bernardino Ramazzini (1633–1714), the father of occupational medicine and one of the first to embrace the scientific method.

SYLVESTER NAMES DR. SOPHIA GEORGE TO LEAD THE CANCER CENTER'S FOCUS ON DIVERSITY, EQUITY, AND INCLUSION

Dr. George will help create the DEI vision and mission for Sylvester.

Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine has named Sophia George, Ph.D., the inaugural associate director of diversity, equity and inclusion.

In this role, Dr. George will develop the vision and participate in the strategic planning of Sylvester's initiatives that promote diversity, equity and inclusion (DEI) as essential elements of its mission. She will oversee the development of the Plan to Enhance Diversity, a National Cancer Institute (NCI) requirement, which includes programs and services to advance the center's commitment to equity, cultural humility, anti-racism and anti-discrimination. The Office of Diversity, Equity and Inclusion will work collaboratively with human resources and the community outreach and cancer research training and education cores to synergize and optimize DEI efforts.

"Our mission statement states that we commit to be an inclusive organization where all members, staff, and trainees feel a sense of belonging, are valued and respected," said Dr. George. "That is our baseline. For Sylvester, our commitment to diversity is not superficial. Sylvester has chosen to address this at the highest level of the organization. The leadership of the cancer center, medical school, and University are onboard."

Sophia George, Ph.D., the inaugural associate director of diversity, equity, and inclusion at Sylvester Comprehensive Cancer Center.

Dr. George will report directly to the director of Sylvester, Stephen D. Nimer, M.D., and will serve on Sylvester's executive committee and board of overseers. The NCI is encouraging its designated cancer centers to formally address equity and inclusion by establishing roles like the one Dr. George now holds at Sylvester.

"We have built a diverse and inclusive cancer center that has made significant strides in advancing research where minority populations are well represented, to include medically underserved communities here in South Florida and around the world," said Dr. Nimer, Oscar de la Renta Endowed Chair in Cancer Research and executive dean for research at the Miller School. "Dr. Sophia George has long supported this commitment and is a leader in advancing health equity through action."

In addition to this new role, Dr. George is an associate professor in the Department of Obstetrics, Gynecology and Reproductive Sciences, in the Division of Gynecologic Oncology. She will continue her extramurally funded research on the study of breast and gynecologic cancers in women from the African diaspora and Africa.

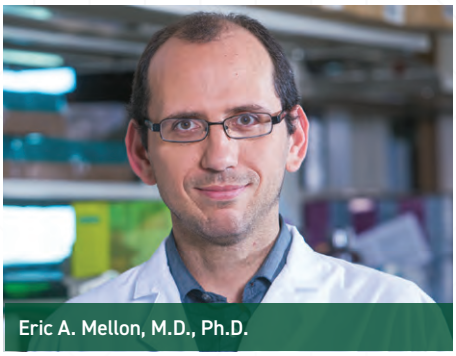
Dr. George was invited to participate in the World Health Organization Global Breast Cancer Initiative, which focuses on developing best practices for United Nations members to achieve health equity in the context of breast cancer diagnosis and treatment. She is a founding faculty member of the University of Miami Center for Global Black Studies, sits on the executive committee and conducts interdisciplinary work on the Reproduction of Race in Miami project led by the co-directors of the center.

INVESTING IN OUR PEOPLE FOR THE FUTURE

SYLVESTER RESEARCHER RECEIVES $5 MILLION NCI MERIT AWARD FOR BRAIN CANCER ADAPTIVE THERAPY STUDY

Research will center on imaging to improve glioblastoma treatment.

A Sylvester Comprehensive Cancer Center researcher has been awarded a $5 million seven-year grant from the National Cancer Institute (NCI) to study how advanced imaging during treatment may be used to improve radiation therapy for patients with glioblastoma, a deadly brain tumor.



Eric A. Mellon, M.D., Ph.D.

"Glioblastoma is the most common cancer originating in the brain with an average survival of only 18-24 months," said Eric A. Mellon, M.D., Ph.D., associate professor of radiation oncology and biomedical engineering at the University of Miami Miller School of Medicine, and co-leader of Sylvester's Neurologic Cancer Site Disease Group. "Our goal is to identify glioblastoma patients who are failing radiation therapy during treatment and implement aggressive second-line treatments to improve survival."

An experienced specialist in the use of magnetic resonance imaging (MRI) for brain cancers, Dr. Mellon is the principal investigator for the study, "A Physiologic Adaptive Radiation Therapy Pipeline for Glioblastoma by Daily Multiparametric MRI and Machine Learning." Dr. Mellon received the highly competitive National Cancer Institute R37 Method to Extend Research in Time (MERIT) award after his project grant scored among the best in the nation. The MERIT award provides early-stage investigators with five years of research funding and eligibility to extend their grant an extra two years.

Dr. Mellon aims to enroll 100 glioblastoma patients in the study using MRIdian, an advanced technology developed by ViewRay, Inc., that combines daily MRI with radiation therapy. This leading-edge technology, now in active use at Sylvester, will allow Dr. Mellon to conduct daily assessments of the brain cavity caused by the surgical removal of the tumor, and any unremovable tumor.

"The findings from our study will help radiation oncologists deliver the most effective personalized care for glioblastoma patients," he said. "Our study may also have important applications for treating other types of tumors."

PH.D. CANDIDATE AT SYLVESTER RECEIVES PRESTIGIOUS F31 NCI GRANT

Research will focus on the relationship between tyrosine kinases and cancer.

Skye Montoya, a Ph.D. candidate in cancer biology at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, has received a prestigious F31 grant from the National Cancer Institute (NCI). The NCI Ruth L. Kirschstein NRSA for Individual Predoctoral Fellows will provide $47,000 a year for three years to support tuition,

Skye Montoya

conferences, and other educational opportunities.

Montoya is a researcher in Dr. Justin Taylor's lab, which studies blood cancer mutations and how these can be targeted with novel therapies. Her research is focused on a group of enzymes, called tyrosine kinases, which play a major role in many cancers. Tyrosine kinase inhibitors can be effective anti-cancer treatments; however, eventually, cancers can learn to resist. Montoya and others in the Taylor lab want to understand why.

"I enjoy the thrill of figuring it out and then seeing the translational component of it, working with patients in clinical trials," said Montoya. "I study signaling pathways, and there are a million different ways it could work. It's like trying to figure out a puzzle without the picture on the box."

Originally from Smyrna, Georgia, just north of Atlanta, Montoya was in a biomedical research magnet program at her high school before going to Kennesaw State University. Earlier this year, she co-authored a paper in the New England Journal of Medicine that identified potential resistance mechanisms to an emerging cancer therapy.

Montoya expects to graduate in spring 2024, but there's still the matter of writing her dissertation. After that, she hopes to pursue a postdoctoral fellowship in another cancer lab.

Patricia I. Moreno, Ph.D.

SYLVESTER'S LEAD OF EVIDENCE-BASED SURVIVORSHIP SUPPORTIVE CARE RECEIVES ABMR EARLY-STAGE INVESTIGATOR AWARD

Dr. Moreno's research will focus on quality of life and well-being for cancer survivors.

Patricia I. Moreno, Ph.D., lead of evidence-based survivorship supportive care at Sylvester Comprehensive Cancer Center and assistant professor in the Department of Public Health Sciences at the University of Miami Miller School of Medicine, was a recipient of the 2022 Academy of Behavioral Medicine Research (ABMR) Early-Stage Investigator Award.

The objectives of Dr. Moreno's research are to understand the significant challenges faced by individuals coping with cancer and to improve outcomes across the cancer continuum through patient-centered health care and tailored, empirically supported interventions. Her research can be divided into two major areas: enhancing quality of life and well-being for cancer survivors, and reducing disparities in cancer prevention and control among Hispanics and Latinos in the U.S.

Founded in 1978, ABMR strives to "provide a forum for established scientists and thought leaders working in the field of behavioral medicine, where cutting-edge ideas can be exchanged in an informal, yet scientifically charged atmosphere," according to the ABMR's mission. ABMR members are distinguished behavioral medicine scholars who have been elected by their peers based on their outstanding scientific contributions.

Ashish Shah, M.D.

NEUROSURGEON ASHISH SHAH RETURNS TO SYLVESTER TO HEAD CLINICAL TRIALS AND TRANSLATIONAL RESEARCH ON BRAIN TUMORS

Dr. Shah will bring novel therapeutics to patients with glioblastoma tumors.

Ashish Shah, M.D., has assumed the newly created position of director of clinical trials and translational research and principal investigator in the Section of Virology and Immunotherapy at Sylvester Comprehensive Cancer Center's Brain Tumor Initiative (BTI) at the University of Miami Miller School of Medicine. Dr. Shah, who calls himself a "quadruple 'Cane," returns to the site of his undergraduate studies, medical school, and residency as a faculty member. This follows a year-long fellowship at the National Institutes of Health, where he focused on clinical trial design and translational neuro-oncology.

Now, Dr. Shah's mission is to marry the clinical trials experience with his laboratory research and neurosurgery background to help the team bring novel therapeutics to patients with brain tumors. His work will focus on the highly aggressive glioblastoma, which represents about half of all malignant brain tumors.

This coupling of neurosurgery expertise with a dynamic research focus is rare, and Dr. Shah joins Michael Ivan, M.D., BTI's director of research, in fulfilling this dual role. Not only has Dr. Shah performed some of the most complex brain tumor surgeries, he has also published scores of papers on novel therapies and treatment approaches.

Much of Dr. Shah's research, however, will focus on viruses associated with brain tumors, which he sees as fundamental to understanding glioblastoma in particular, and which may underlie curative treatment that has been so elusive in this complex cancer.

The team is planning future biomarker-driven virotherapy trials, as well as trials that will help predict which patients may benefit from certain therapies.

Nagaraj Nagathihalli, Ph.D. (in the back).

SYLVESTER PANCREATIC CANCER RESEARCHER DR. NAGARAJ NAGATHIHALLI AWARDED FLORIDA DEPARTMENT OF HEALTH GRANT

His studies will center on pancreatic cancer and therapeutic options.

The Florida Department of Health has awarded Nagaraj Nagathihalli, Ph.D., an associate professor at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, a $583,200 grant to study tobacco risk, tumor progression and therapeutic options for pancreatic cancer.

A leading cancer biologist, Dr. Nagathihalli has been working to identify driving cellular and molecular mechanisms related to how tobacco promotes pancreatic cancer progression and aggressiveness, and to develop new therapeutic strategies to reduce the poor outcomes associated with this disease.

"Despite such a high prevalence of tobacco-associated pancreatic cancer in the population, mechanistic understanding of how tobacco consumption precedes pancreatic neoplasia remains limited," said Dr. Nagathihalli, principal investigator on the study and associate professor in the DeWitt Daughtry Family Department of Surgery at the Miller School. "Ingesting tobacco smoke triggers inflammatory and immune responses resulting in inflammation and fibrosis of the pancreatic parenchyma, providing a milieu amenable to the aggressive progression of pancreatic neoplasia and to evade therapeutic intervention."

"Although every cancer is different, it is essential that the scientific community integrate the lessons we have learned from other tobacco-related cancers into therapeutic approaches. Both immune stimulation and curtailing immune evasion are crucial to improve outcomes for pancreatic cancer patients, who are uniquely susceptible due to their specific smoking-induced mechanism," Dr. Nagathihalli said.

The incidence of pancreatic cancer in the U.S. is rapidly increasing, and the burden is particularly high in Florida. Despite being the 12th most common cancer diagnosed, pancreatic cancer will soon overtake colorectal cancer as the second leading cause of cancer death in the U.S.

SCOTT M. WELFORD, PH.D. AND DR. PRIYAMVADA RAI TO CO-LEAD SYLVESTER'S TUMOR BIOLOGY RESEARCH PROGRAM

The researchers aim to create a collaborative space to better understand cellular functions.

Scott M. Welford, Ph.D., and Dr. Priyamvada Rai are the new Tumor Biology Research Program co-leaders at Sylvester Comprehensive Cancer Center at the University of Miami

Scott Welford, Ph.D.

Miller School of Medicine, together with Wael El-Rifai, M.D., Ph.D., associate director of basic science and John and Judy Schulte Senior Endowed Chair in Cancer Research.

In their roles, Drs. Rai and Welford will boost interactions and collaborations among Sylvester's researchers to better understand how cancer cells behave — a critical step for developing therapeutic approaches that benefit patients in South Florida and beyond, according to Dr. El-Rifai.

A cancer biologist by training, Dr. Welford is also a professor and Biology Division chief in radiation oncology at Sylvester. He completed a post-doctoral fellowship in radiation oncology at Stanford University and started a career as a cancer center faculty member about 15 years ago at Case Western Reserve University School of Medicine, where he said he gravitated toward translational cancer biology.

Dr. Rai, professor of radiation oncology and director of the Medical School Summer Undergraduate Research Fellowship (SURF) Program, joined the Miller School in 2008. She has been

Priyamvada Rai, Ph.D.

The Sylvester Employee Recognition Pilot Program recognizes employees who have gone above and beyond their regular duties.

involved with Sylvester's Tumor Biology Program in the past. In 2017, she was an Aim leader for the Mechanisms of Tumor Initiation and Progression component of the program, assisting program leaders with this specific aim of the original Cancer Center Support Grant for National Cancer Institute (NCI)-designated Cancer Centers.

Sylvester's Tumor Biology Research Program is one of four highly collaborative, multidisciplinary research programs at Sylvester organized by scientific themes, which stem from the cancer center's strengths and priorities, as well as prevalent malignancies within South Florida's culturally diverse population.

The program focuses on cellular interactions of tumors. This includes defining and understanding mechanisms underlying tumor initiation and progression; determining how inflammation and immunity influence tumorigenesis and the tumor microenvironment; and identifying and validating biological and molecular-based therapeutic approaches to cancer.

EMPLOYEES WHO GO ABOVE AND BEYOND AT SYLVESTER EARN SPECIAL RECOGNITION

Melissa Triana was nominated for her work on the new Transformational Cancer Research Building.

Sylvester Comprehensive Cancer Center's Board of Overseers Chair Adam Carlin, Vice Chairs Jayne Sylvester Malfitano and Miguel Farra, Director Stephen D. Nimer, and other leaders gathered on June 10, 2022, to recognize and celebrate cancer center employees who exemplify Sylvester's mission and the University's DIRECCT Values.

The Sylvester Employee Recognition Pilot Program is headed by Sylvester's Board of Overseers. The program, which launched in 2021, recognizes employees who have gone above and beyond their regular duties. Managers are invited each quarter to nominate employees who are exceeding expectations.

Nominee Melissa Triana, M.B.A., R.A., PMP, LEED AP, director of facilities and operations at Sylvester, supports the physical infrastructure where Sylvester's groundbreaking research and clinical care take place. This last year, Triana and her team have been spending a lot of their time on the Transformational Cancer Research Building (TCRB).

"We look forward to the grand opening of the TCRB that will provide our clinical research patients, imaging patients and researchers an avenue to expand translational research at the institution," Triana said.

Impacting Lives

Nominated employees stand out for the unique and extraordinary alignment between Sylvester's mission and how they put those goals into action, according to Dorothy Graves, Ph.D., assistant vice president and associate director of administration at Sylvester.

"You are appreciated for who you are and what you do," Dr. Graves said. "You've had an impact on not only the lives of those that you've directly touched, but also your colleagues' and your peers'. It is my belief — my observation — that this is the best of Sylvester."

The Sylvester Employee Recognition Pilot now continues into its second year, with nominations open quarterly.

FOCUSING ON THE PATIENT JOURNEY

Cortney Kaiserman Bridges with her husband, Clint Bridges.

SURVIVING AND THRIVING

A breast oncologist treated the patient, not just the cancer.

Cortney Kaiserman Bridges was in the prime of her life when her world came to a screeching halt. While doing a monthly breast self-exam, she felt a lump.

Concerned it could be cancerous, her radiologist recommended an ultrasound and biopsy. A few days later, Bridges got a call that would forever change her life. She had triple-negative breast cancer.

Bridges was terrified. A prior illness had resulted in debilitating neuropathy, and Bridges feared the side effects of chemotherapy, so she refused treatment.

Her physician, Carmen Calfa, M.D., a breast medical oncologist at Sylvester Comprehensive Cancer Center — a part of UHealth - the University of Miami Health System — was not willing to take "no" for an answer.

"As a National Cancer Institute-designated cancer center, Sylvester is able to offer options that others can't," said Dr. Calfa, who is also medical co-director for the cancer survivorship program at Sylvester. "We work together as a multidisciplinary team to tailor the treatment plan to the patient and their individual needs."

What makes Sylvester special, said Dr. Calfa, is that it embraces the patient as a whole.

"I am very blessed to have found Dr. Calfa. She provided the love and support that I desperately needed during one of the darkest times of my life," Bridges said, five years cancer-free. "Not a moment goes by that I do not thank her for allowing me to live this beautiful life today. I am forever grateful."

Patricia I. Moreno, Ph.D.; Frank J Penedo, Ph.D.; Jessica MacIntyre, M.S.N., ARNP; and Carmen Calfa, M.D.

SYLVESTER GOES TO CAPITOL HILL IN SUPPORT OF COMPREHENSIVE CANCER SURVIVORSHIP ACT

Experts from Sylvester Comprehensive Cancer Center, part of the University of Miami Health System, joined members of Congress on Capitol Hill, Dec. 14, 2022, to back legislation.

Frank J. Penedo, Ph.D., associate director, cancer survivorship and translational behavioral sciences, director of cancer survivorship and supportive care at Sylvester, spoke in favor of the legislation and explained how it would fill existing gaps in cancer care.

"Despite advances in cancer care and improvements in survival, effectively meeting the chronic and debilitating needs of cancer survivors remains a challenge," Dr. Penedo said. "The Comprehensive Cancer Survivorship Act proposes to implement much-needed fundamental standards of care and resources — including coverage and care coordination — to help cancer survivors live their very best possible lives."

Dr. Penedo traveled to Washington, D.C., along with Carmen Calfa, M.D., breast medical oncologist and medical co-director of Sylvester's Cancer Survivorship Program; Patricia I. Moreno, Ph.D., lead of evidence-based survivorship supportive care; and Jessica MacIntyre, M.S.N., ARNP, executive director of clinical operations and oncology nurse practitioner at Sylvester.

The Comprehensive Cancer Survivorship Act, as introduced, addresses the entire survivorship continuum of care for survivors of all cancer types, their families and their caregivers. In addition to coverage and care coordination, the legislation includes support programs such as financial assistance grants to help those faced with workforce challenges.

U.S. Rep. Debbie Wasserman Schultz (D-FL), a cancer survivor, is a sponsor of the legislation.

SYLVESTER'S SEXUAL HEALTH AFTER CANCER PROGRAM EXPANDS TO MEET NEEDS OF WOMEN WITH CANCER

Menopause Urogenital Sexual Health and Intimacy Clinic (MUSIC) program adds two specially trained oncology nurse practitioners to help women with a history of cancer safely maintain sexual health through treatment and beyond.

Kristin E. Rojas, M.D., assistant professor of surgical oncology in the DeWitt Daughtry Department of Surgery and Sylvester Comprehensive Cancer Center at the University Miami Miller School of Medicine, realized she struck a chord with women being treated for cancer when she started the Menopause Urogenital Sexual Health and Intimacy Clinic (MUSIC) in 2020.

An unexpectedly high demand for the MUSIC program among women


Kristin E. Rojas, M.D.

concerned by vaginal dryness, painful sex, low sexual desire and more, challenged Dr. Rojas and colleagues to expand, soon after the clinic doors opened its doors at Sylvester. Two specially trained oncology nurse practitioners were added to help women with a history of cancer safely maintain sexual health through treatment and beyond.

"MUSIC adds to the comprehensive aspect of survivorship care at Sylvester, making sure that we not only address side effects that we talk about all the time, like hot flashes, joint pain, fatigue, etc., but also the more taboo topics that aren't always brought up," Dr. Rojas said.

Referrals to the program include women who are undergoing treatments that trigger menopause or worsen menopausal symptoms. They might silently suffer from symptoms related to genitourinary complaints, such as vaginal dryness, painful sex or from a global sexual functioning aspect, such as depressed libido.

"One might think that these symptoms only impact gynecologic or breast cancer patients who get estrogen-blocking medication, but it's also women with other cancer types. In fact, anyone who gets chemotherapy can experience these issues," she said. "Women who have large abdominal surgery, like a radical hysterectomy or a colectomy, could have sexual function concerns. Anyone who has had their ovaries removed, as well as women who haven't had surgery or chemotherapy but are coping with the psychologic aspects of the diagnosis—that, too, can influence aspects of intimacy."

The MUSIC program is one of only a few women's sexual health programs at cancer centers in the U.S., and it serves as a research center for new treatments aimed at addressing women's sexual health concerns in the setting of cancer.

Care guidelines for prostate and other cancers include the importance of addressing the potential impact of cancer treatment on men's sexual health.

"Oftentimes, men are given options for treatment based on how treatments will impact their sexual health," Dr. Rojas said. "We're demonstrating this also is an important option for women undergoing cancer treatment, not only from an equity standpoint but also to make sure these resources are effective and safe for women with cancer. For a long time, we didn't have solutions for these patients, but that's changing. It's important to steer our patients to providers like ours who are oncology clinicians experienced in treating sexual health concerns."

SYLVESTER CELEBRATES INAUGURAL CANCER SURVIVORSHIP SYMPOSIUM

More than 160 attendees took part in a day of learning and collaboration.

The Sylvester Comprehensive Cancer Center hosted the inaugural Cancer Survivorship Symposium, Nov. 11, 2022, in Coral Gables, Fla., and featured 17 program sessions, eight exhibitors, and a distinguished keynote address highlighting various aspects of cancer survivorship in research and clinical services.

Sylvester organized the symposium to bring together the clinicians and researchers who are dedicated to meeting the unique needs of the growing number of survivors within the community Sylvester serves.

"The Sylvester survivorship team exemplifies principles of excellence, teamwork, and the importance of community," said Stephen D. Nimer, M.D., director of Sylvester, Oscar de la Renta Endowed Chair in Cancer Research, and executive dean for research at the University of Miami Miller School of Medicine, in his opening remarks. "We have recruited tremendous individuals who bring the most cutting-edge research to patient care. The way we take care of our patients today impacts future survivors, their families, and caregivers."

"This symposium provides an opportunity to come together to discuss innovative and transformative research programs and robust clinical services, as well as gain perspectives and guidance from our survivors," added Frank J. Penedo, Ph.D., associate director, Cancer Survivorship and Translational Behavioral Sciences,

FOCUSING ON THE PATIENT JOURNEY

(From left) Carmen Calfa, M.D.; Jessica MacIntyre, M.S.N., ARNP; Frank J. Penedo, Ph.D.; and Matthew Schlumbrecht, M.D.

director of Cancer Survivorship and Supportive Care at Sylvester. "These meetings create a forum for exchanging ideas, discussing opportunities, and planning for the future of cancer survivorship research and care."

Kicking off the morning program were various talks on technology-delivered psychosocial interventions and assessments. The implementation of Sylvester's My Wellness Check has proven to be associated with lower rates of emergency room visits and hospitalizations in survivors since its launch in June. The assessment is also the first electronic health record-integrated symptom and supportive care needs assessment for ambulatory oncology care with Spanish-speaking patients.

In serving the diverse communities of South Florida, Sylvester researchers have made great progress in understanding the differences in diagnoses, treatment responses and outcomes in different races, ethnicities and patient populations.

Paulo S. Pinheiro, M.D., Ph.D., research associate professor at Sylvester and the Miller School's Department of Public Health Sciences, opened the session by addressing Hispanic cancer patients' worse survivorship outcomes relative to other ethnicities.

Dr. Pinheiro's research showed how many Hispanics face challenges in their survivorship journey because of economic inequalities, access to care, and receiving less screening. To better understand factors that promote optimal adjustment and survival among Hispanics diagnosed with cancer, Matthew Schlumbrecht, M.D., medical co-director of survivorship clinical research programs at Sylvester, continued the conversation, bringing attention to the South Florida Caribbean Black community. His presentation showed how Black men and women born in the U.S. have different cancer survival rates than those born in the Caribbean and Africa. Providers can significantly impact patient risks and outcomes by increasing Afro-Caribbean participation in clinical trials, understanding the patient environment and providing supportive services.

Marc Puccinelli, Ph.D., assistant professor of clinical psychology, wrapped up the diversity research session as he addressed the need for more health equity in the LGBTQ community. His work evaluated specific disparities and barriers in LGBTQ individuals' cancer care and further discussed how HIV positivity in LGBTQ communities has been associated with greater risks for lung, anal and colorectal cancers, among others.

Carmen Calfa, M.D., medical co-director for the survivorship clinical program at Sylvester, emphasized that survivorship starts at the time of diagnosis, continues throughout life and includes caregivers. Dr. Calfa discussed the value of addressing patients' physical, emotional, spiritual and other needs as they occur, comprehensively.

"We use conventional medicine as well as music, exercise, nutrition, acupuncture, massage and yoga to promote better physical and emotional health, reduce risk of recurrence and new cancers, and improve quality of life and survival," Dr. Calfa said. "The risk-stratified approach that we are taking at Sylvester offers a personalized and coordinated approach to cancer survivorship."

A panel discussion including providers, patients and a caregiver explored the use of social media, podcasts and mentorship to build connections between AYA cancer patients. (From left) Teresa Neira, Ph.D., M.S.W., LCSW; Stephanie Polanco, M.S.W.; Christine Papayorgis; Sonia Hutchinson; Ashlee Cramer; Michael Cramer; and Leslie Hutchinson, M.S.Ed.

YOUNG CANCER SURVIVORS SHARE EXPERIENCES, SUPPORT AT SYLVESTER'S AYA SUMMIT

The event, geared to support adolescent and young adult cancer patients, addressed the unique challenges and needs during and after treatment.

Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine recently brought together cancer survivors from 15 to 39 years old at the Adolescent and Young Adult (AYA) Cancer Summit in Hollywood Beach, Fla., Oct. 8, 2022.

"This was an opportunity for patients to get together, network among themselves, support each other, and share experiences," said Julio C. Barredo, M.D., director of children's cancer programs at Sylvester and professor of pediatrics, medicine, biochemistry and molecular biology at the Miller School.

"This particular group of patients has different needs from most other cancer patients," Dr. Barredo said. For example, the younger group must not only deal with cancer treatment, but also with family, school and other relationships. For people in their 20s and 30s, financial issues are important because patients may or may not have assistance from their families or may lack health insurance. Being able to start families of their own after treatment is also a concern.

Sylvester is "uniquely positioned as an NCI-designated cancer center to treat patients through the different stages of their lives, from the first day of life to the last day of life," Dr. Barredo said.

Among the topics presented, attendees learned about the challenges of reproductive health and fertility after treatment and the options available before, during and after treatment.

Sylvester social workers, who made several summit presentations, play a major role in assisting and supporting all cancer patients starting with their diagnosis, said Lisa Marie Merheb, M.S.W., LCSW, director of social services at Sylvester.

"This summit was geared to support our adolescent and young adult cancer patients," Merheb said. "This age group has a unique set of challenges. Many expressed how isolating it is for them while undergoing cancer treatment, and many said to me, 'This is just what I needed.' Patients connected with each other, and continued to connect and share their stories even after the summit was over."

Richard Gaff with daughter, Kadence, and wife, Danni.

TESTICULAR CANCER PATIENT, AGAINST ALL ODDS, IS NOW A FATHER

Microdissection testicular sperm extraction was used to identify potentially viable sperm to preserve for future in vitro fertilization (IVF).

Richard Gaff is a fighter. He served in the U.S. Army in Afghanistan after 9/11, but his biggest battle, by far, was facing testicular cancer. It was discovered in not one but both of his testicles, which is extremely rare.

Gaff had surgery to remove one testicle but was hesitant to remove the other one because he wanted to be able to have a biological child. The problem was his second testis was not producing sperm.

"I was not ready to let my dream die," Gaff said. "I knew in my heart there was still a chance I could become a father."

As Gaff underwent treatment for his cancer with Dipen J. Parekh, M.D., the founding director of the Desai Sethi Urological Institute, COO and director of robotic surgery at UHealth, Ranjith Ramasamy, M.D., a member of Sylvester Comprehensive Cancer Center and director of reproductive urology at the University of Miami Miller School of Medicine, successfully performed a microdissection testicular sperm extraction to identify potentially viable sperm within Gaff's testis and preserve the sperm for future in vitro fertilization (IVF). Dr. Ramasamy is one of the few surgeons in the country able to perform this highly specialized fertility preservation procedure.

Gaff is now cancer-free and the father of a beautiful baby girl. "Kadence is definitely a miracle baby," Gaff said. "My wife, Danni, and I are blessed to have her because of the medical expertise and cutting-edge technology only available at a highly advanced research hospital like Sylvester Comprehensive Cancer Center and UHealth – the University of Miami Health System."

NEW "BELIEVE IN YOU" TRAINING PROGRAM TO HELP CANCER SURVIVORS LIVE A HEALTHIER LIFESTYLE

Initiative offers participants a roadmap for becoming active and improving health.

Sylvester's Cancer Survivorship program reached an important milestone in Oct. 2022 with the launch of "Believe in You – You Are Living Proof," an 18-week training program created to help cancer survivors live a healthier lifestyle.

"The challenge for many cancer patients is they don't know where and how to safely start a lifestyle program, and, perhaps because of that, many survivors do not meet recommendations for physical activity and nutrition," Tracy E. Crane, Ph.D., R.D.N, director of Lifestyle Medicine and Digital Health for Cancer Survivorship. There is strong evidence in published studies by Sylvester researchers and others that meeting these recommendations can reduce risk of cancer recurrence and mortality and improve survivors' quality of life.

The first undertaking of the program was to prepare survivors to take part in a future Dolphins Challenge Cancer (DCC) XIII, that took place on Feb. 25, 2023. "The DCC provided the perfect goal to strive for with this 18-week training program, which offered structured, individualized training sessions designed to safely increase their aerobic capacity, strength and improve their overall diet. Believe in You program participants received complimentary training specifically to prepare for walking or running five miles or riding 15 miles in the DCC," Dr. Crane explained.

Survivor Iliana Suarez and her husband are program participants training for the DCC.

The Believe in You program included survivors who had committed to doing the DCC, as well as those who did not signed up because they were unsure if they could do the walk, run, or bike, said Paola Rossi, M.D, M.S., the manager of clinical operations for lifestyle medicine in cancer survivorship at Sylvester. Dr. Rossi co-designed the Believe in You training program, along with members of the CRANELab research team, and coached participants through it.

Sylvester faculty and staff conduct baseline physical activity and nutritional assessments on each of the program's participants, to tailor the program to them and their goals. The group met twice weekly, including an in-person meeting every Saturday for a group exercise and nutrition class and by Zoom through the week for strength classes. Also, each participant was scheduled to complete a follow-up assessment the week before the DCC to monitor their health and potential progress, according to Dr. Rossi.

"Through this program, we've generated an amazing bond with our survivors and their caregivers," Dr. Rossi said. "We started out with a limited group but want to expand and grow the program each year." Look for Believe in You to start up again in August 2023 welcoming survivors and caregivers to train for the DCC XIV in 2024.

> At Sylvester, we celebrate art and its power to heal, to connect us to one another and the community.
>
> **Desert Horse Grant**

ART IS MEDICINE

Sylvester features 141 works of art in new exhibit.

Walking through the expansive lobby of Sylvester's main facility on the medical campus, your eyes are immediately drawn to a gallery wall, filled with soaring artwork. Sylvester's first *Art Is Medicine* exhibit, a brainchild of Sylvester's Chief Transformation Officer, Desert Horse Grant, is a compilation of art by artists representing the continuum of care: patients, faculty, staff, families, cancer survivors and members of the local community.

"One beautiful way of helping with cancer is using art and music therapy," Horse Grant said. "At Sylvester, we celebrate art and its power to heal, to connect us to one another and the community."

Sylvester sought visual arts entries, including paintings, sketches, photographs, and digital art, and received 141 submissions. A panel of judges from within and outside the visual arts community selected 17 works to be framed and exhibited at the new Sylvester Gallery. All other entries are on display on video monitors in the gallery and exhibited in digital picture books at Sylvester at Plantation, Sylvester at Deerfield, and the Lennar Foundation Medical Center.

"We were proud to launch the Sylvester Gallery on Dec. 1, aligned with the opening week of Miami's Art Basel," said Stephen D. Nimer, M.D., director of Sylvester Comprehensive Cancer Center. "Many of our patients appreciate Miami's renowned art, from its street murals to fine art galleries, and we felt it was important to bring original artwork into a prominent space where they receive treatment and care."

Desert Horse Grant, Sylvester´s Chief Transformation Officer.

FOCUSING ON THE PATIENT JOURNEY

Miami Dolphins Linebacker Andrew Van Ginkel with a young patient during the toy giveaway.

SPREADING THE HOLIDAY SPIRIT TO CHILDREN AT ALEX´S PLACE

Miami Dolphins and AutoNation came together to some spread some holiday cheer and happiness to children at Alex's Place, Sylvester Comprehensive Cancer Center´s pediatric oncology unit, through a toy giveaway. On the morning of Tuesday, December 20th, AutoNation and Miami Dolphins executives, joined by Linebacker Andrew Van Ginkel, distributed dozens of gifts and brightened the spirit of young cancer fighters and their families. After the joyful event, the executives, led by Dolphins Cancer Challenge Chair Liz Jenkins, received a tour of Sylvester´s state-of-the-art facilities.

ONCOLOGY SUPPORT SERVICES:

- ACUPUNCTURE
- ART THERAPY
- EXERCISE PHYSIOLOGY
- MASSAGE THERAPY
- MUSIC THERAPY
- NUTRITION
- PSYCHOLOGY
- PSYCHIATRY
- RESOURCE CENTER
- SOCIAL WORK
- SPIRITUAL CARE
- YOGA

EDUCATION AND PATIENT SUPPORT SERVICES:

- DISEASE/MEDICATION THERAPY MANAGEMENT
- NURSE NAVIGATOR
- GENETIC COUNSELING

CANCER SUPPORT BY THE NUMBERS

547 TOTAL ZOOM GROUPS FOR 2022

2,552 PARTICIPANTS IN ART AND MUSIC THERAPY

11,211 INDIVIDUAL PATIENT ENCOUNTERS IN ACUPUNCTURE, MASSAGE THERAPY, AND EXERCISE PHYSIOLOGY

220 WIGS, SCARVES, AND HATS DISTRIBUTED TO PATIENTS

308 PATIENTS BENEFITED FROM THE ADOLESCENT & YOUNG ADULT (AYA) PROGRAM

68 PATIENTS AND SURVIVORS PARTICIPATED IN THE BREAST CANCER PEER MENTORSHIP PROGRAM

818 PATIENTS RECEIVED GENETIC COUNSELING SERVICES

23,739 NEW PATIENTS SUPPORTED BY NURSE NAVIGATORS

BUILDING A HEALTHIER WORLD

Dr. Biden's visit highlighted the importance of breast cancer screening, research and survivorship programs.

FIRST LADY JILL BIDEN VISITS SYLVESTER COMPREHENSIVE CANCER CENTER TO SPREAD BREAST CANCER AWARENESS

Visit highlighted the importance of cancer screening, research and survivorship programs.

In honor of Breast Cancer Awareness Month, first lady Jill Biden, Ed.D., traveled to Sylvester Comprehensive Cancer Center in Plantation, Fla., on Oct. 15, 2022, to support the fight against breast cancer. The first lady's visit is part of the Biden administration's renewal of the Cancer Moonshot initiative. In 2016, then-Vice President Joe Biden launched the Cancer Moonshot to speed progress in cancer research.

"We survive with the love of our families, the dedication of our doctors and nurses, and the support of communities, like this one, that are coming together to fight this disease," Dr. Biden said. U.S. Representative Debbie Wasserman Schultz, a breast cancer survivor, and Monica Bertagnolli, M.D., the newly sworn-in National Cancer Institute (NCI) director, accompanied Dr. Biden.

South Florida's diverse community — 43% Hispanic and 24% Black – make it critical to tailor research and care.

"We are able to provide novel therapies for our cancer patients, and the research teams we assemble are conducting research to better understand specific risk factors for Hispanics and Black communities, and others where health inequities may exist. Sylvester is now positioned to accelerate scientific discovery across the United States," said Stephen D. Nimer, M.D., director of Sylvester Comprehensive Cancer Center, part of UHealth – University of Miami Health System, and executive dean of research at the Miller School of Medicine.

During a tour of the facility, the first lady learned how Sylvester is leading the NCI's first Hispanic Cancer Survivorship Cohort Study and that the Sylvester My Wellness Check portal, an online program that provides patients with a personalized health care experience, has reduced emergency room visits and hospitalizations. She also learned of the support provided through the Nurse Navigator program in clinical care.

SYLVESTER LEADERS MEET WITH WHITE HOUSE OFFICIALS, AGENCIES ABOUT REDUCING CANCER

Researchers presented their approach to lowering cancer rates.

A delegation of leaders from Sylvester Comprehensive Cancer Center, part of UHealth – University of Miami Health System, visited the nation's capital late last year to share some of the groundbreaking research happening at the National Cancer Institute (NCI)-designated cancer center.

The group visited the White House and several other federal agencies, as part of a renewed focus on President Joe Biden's Cancer Moonshot initiative. The initiative aims to cut American cancer death rates in half within the next 25 years.

(From left) Erin Kobetz, Ph.D., M.P.H.; Stephen D. Nimer, M.D.; Danielle Carnival, Ph.D., of the Cancer Moonshot initiative, and Shreya Kuntawala.

"This trip reflects a recognition of our ability at Sylvester to contribute to cancer knowledge on the national stage," said Stephen D. Nimer, M.D., executive dean of research at the Miller School of Medicine. In 2015, Dr. Nimer, the Oscar de la Renta endowed chair of cancer research, met with then-Vice President Biden during the creation of the Cancer Moonshot initiative.

At the White House, Erin Kobetz, Ph.D., M.P.H., vice provost of research and scholarship for the University of Miami and director of its Firefighter Cancer Initiative (FCI), explained some of the work that the FCI has been doing to understand and reduce the cancer burden on firefighters. She also spoke about research from Alberto Caban-Martinez, D.O., Ph.D., M.P.H., deputy director of the FCI and assistant provost for research integrity at the Miller School of Medicine. Dr. Caban-Martinez's involvement in the World Health Organization team helped reclassify firefighting as a carcinogenic-risk profession last summer.

"These visits and advocacy trips serve as an amazing way to highlight the great work of UM's physicians, research and cutting-edge advancements," said Shreya Kuntawala, director of government relations for the university and UHealth.

SYLVESTER GAME CHANGER VEHICLE AMONG FIRST IN NATION TO OFFER MOBILE PROSTATE CANCER SCREENING

Community outreach program addresses disparities through awareness and education.

To combat prostate cancer in South Florida communities, the Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine's Game Changer vehicles are driving awareness and education to make an impact on survival rates.

The mobile vehicle brings health education and free screenings for many cancer types to South Florida communities in need and is, for the first time, offering prostate-specific antigen (PSA) screening for prostate cancer. Sylvester's mobile PSA screening program is one of the first in the nation.

"When we catch prostate cancer in the early stages, there is a 95% chance that we can cure it," said Brandon Mahal, M.D., assistant professor of radiation oncology at Sylvester. "The PSA is the best screening test that we have in terms of being able to catch cancer early and being able to cure it."

Black men are at especially high risk for prostate cancer, which makes PSA testing via Sylvester's mobile units in communities like Little Haiti even more important, according to Dr. Mahal.

"This initiative, which is a collaboration between Sylvester Comprehensive Cancer Center, the organizations represented in the Southeast Florida Cancer Control Collaborative, and ZERO – The End of Prostate Cancer, highlights the importance of strong community-academic partnerships in addressing the needs of the community, with the objective of achieving health equity," said Paco C. Castellon, M.P.H., M.B.A., director of Sylvester's Community Outreach and Engagement Program.

Sylvester researchers are collaborating with international colleagues to develop a first-of-its-kind, point-of-care PSA test.

SYLVESTER HOSTS FOURTH ANNUAL NATIONAL FIREFIGHTER CANCER SYMPOSIUM

Speakers focus on research, prevention and survivorship strategies.

More than 400 firefighters from South Florida and nationwide participated in the National Firefighter Cancer Symposium 2022. Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine co-hosted the event with Sylvester's Firefighter Cancer Initiative (FCI), Feb. 24-25, 2022.

"We are working together on collaborative research that can be translated into action and save lives," said Erin Kobetz, Ph.D., M.P.H., a professor of medicine, public health sciences and obstetrics and gynecology. Dr. Kobetz, director of Sylvester's Cancer Control Program, is also co-vice provost for research and the John K. and Judy H. Schulte Senior Endowed Chair in Cancer Research for Sylvester and associate director for population science and cancer disparities.

Key themes of the symposium included cancer risks and firefighters' physical, mental and emotional health, as well as mobile clinic and cancer screening initiatives.

Natasha Schaefer Solle, Ph.D., RN, co-deputy director and research assistant professor at Sylvester, stated that cancer survivorship rates have increased significantly in the past seven years, noting Sylvester' online FCI Cancer Education and Survivorship portal.

Vandana Sookdeo, M.D., M.B.A., director of clinical programs, mentioned that Sylvester's survivorship programs — both online and in person are aimed at enhancing the well-being of cancer patients and families.

Because of Sylvester's FCI, there are advancements in research, education and services for Florida firefighters, said Alberto J. Caban-Martinez, D.O. Ph.D., M.P.H., C.P.H., deputy director of Sylvester's FCI and assistant professor of public health sciences. One example is Florida's dedicated firefighter cancer registry project, which helped inform workers' compensation laws at the state level.

Sylvester is the recipient of more than $8.465 million in state of Florida grants, since 2015, as well as additional funds for firefighter cancer decontamination, construction and equipment.

This past year, the FCI team expanded research and outreach services to firefighters in response to the COVID-19 epidemic and the tragic Surfside condominium collapse, Dr. Caban-Martinez said. Studies included COVID-19 screening, testing and return-to-work strategies, as well as research on chemicals like per- and polyfluoroalkyl.

FLORIDA ACADEMIC CANCER CENTER ALLIANCE BRINGS CANCER RESEARCHERS TOGETHER DURING ANNUAL RETREAT

More than 200 researchers converged to collaborate on cancer research.

As every year since its inception in 2014, the Florida Academic Cancer Center Alliance (FACCA) celebrated its annual research retreat on Jan. 18-19, 2022. As with the 2021 retreat, this year it was also held virtually. The mission of FACCA is to expedite innovation in the area of cancer research throughout the State of Florida and maximize state investments in biomedical technology and research.

The 2022 two-day event brought together almost 200 researchers from the three member institutions: Sylvester Comprehensive Cancer Center, H. Lee Moffitt Cancer Center & Research Institute and the University of Florida Health Cancer Center. Topics of discussion included the newest updates on cancer and aging, cancer care delivery, metabolism, tumor immunology & immunotherapy, and virus & Cancer (HPV and HIV).

Remarks highlighting the benefit of collaboration in advancing cancer care were given by Stephen Nimer, M.D., director, Sylvester Comprehensive Cancer Center, Oscar de la Renta endowed chair in cancer research and executive dean for research, Miller School of Medicine; John Cleveland, Ph.D., executive vice president, center director and chief scientific officer at H. Lee Moffitt Cancer Center & Research Institute; and Jonathan Licht, M.D., UF Health Cancer Center director and the Marshall E. Rinker senior chair.

Florida Academic Cancer Center Alliance

Moffitt Cancer Center
Sylvester Comprehensive Cancer Center
University of Florida Health Cancer Center

SYLVESTER RESEARCHERS IDENTIFY HIGH DEATH RATE FROM GASTRIC CANCER IN SOUTH FLORIDA

New study published in scientific journal Gastroenterology.

Investigators at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine were part of an international collaboration of gastroenterologists, epidemiologists and oncologists who study gastrointestinal (GI) deaths in U.S. counties. Scientific journal *Gastroenterology* recently published the researchers' findings.

Counties with the highest 5% mortality rates for gastric, pancreatic and colorectal cancer were primarily in the Southeastern U.S. Colorectal cancer mortality was particularly high in counties in Arkansas, Louisiana, Kentucky, Tennessee, Mississippi, Alabama, Georgia, South Carolina and northern Florida.

Cigarette smoking and living in rural areas were the factors most closely linked with GI cancer-related mortality.

South Florida had mixed results when it came to mortality from the different GI cancer types.

"Compared to the rest of the U.S., in South Florida we have much lower rates of mortality from esophageal and pancreatic cancer, average rates of mortality from colorectal cancer and above-average rates of mortality from gastric cancer," said Sylvester researcher David Goldberg, M.D., associate professor of medicine in the Division of Digestive Health and Liver Diseases at the Miller School.

"Our diverse population that includes many immigrants from countries with above-average rates of Helicobacter pylori is likely one of the reasons for our higher rates of mortality from gastric cancer," said Dr. Goldberg.

The high rate of gastric cancers diagnosed in South Florida underscores the importance of identifying and eradicating modifiable risk factors, according to study author and Sylvester researcher Daniel Sussman, M.D.

Sylvester researchers are working to identify community prevalence rates for H. pylori using Sylvester's Game Changer mobile screening vehicles, and antimicrobial susceptibility of *H. pylori*. The Game Changer vehicles help increase access to cancer screening and close the gap in equitable care.

PARTNERING FOR ONE MISSION

PARTNERING FOR ONE MISSION

DOLPHINS CHALLENGE CANCER XII RAISED RECORD-BREAKING $8.4 MILLION FOR SYLVESTER

Proceeds from the largest fundraising event in the National Football League will fund innovative cancer research.

Under the "one team, one fight" mentality to challenge cancer and unite the community in South Florida, Dolphins Challenge Cancer XII (DCC XII), celebrated in February 2022, was yet another record-breaking event, with 4,484 participants and $8.4 million raised.

Following a $75 million commitment to Sylvester in November 2020, the largest known philanthropic pledge in the NFL, the DCC's 12-year total contribution now stands at $53.9 million, which funds the advancement of cancer care through breakthrough science, leading-edge technology, and personalized patient care, and directly impacts the South Florida community.

The continued success of DCC would not be possible without the efforts of many organizations and partners, most notably Lennar Corporation, University of Miami's Team Hurricanes, Miami Dolphins' Team Dolphins, Berkowitz Pollack Brant and Provenance Wealth Advisors, Keyes Family of Companies, Team Gene and Ali – Peck Family, Break The Cycle, Team Letendre and Miami Dolphins Fan Clubs, which have individually supported DCC XII by raising more than $100K.

> Twelve years in, the DCC has raised more than $53 million for innovative cancer research at Sylvester Comprehensive Cancer Center. These funds have directly supported cancer research and critical studies; making new treatments possible that have positively impacted, and even saved lives.

Tom Garfinkel, vice chairman, president and CEO of the Miami Dolphins and Hard Rock Stadium.

DCC XII IMPACT 2022

#1 TEAM FUNDRAISING EVENT IN THE NFL

OVER **1,000,000** MILES CONQUERED

$8.4 million RAISED

4,484 PARTICIPANTS

OVER **200** CANCER SURVIVORS PARTICIPATED

Cancer survivor Joany Rodriguez rings the bell.

Nivardo Beaton III, center, with, from left, Michelle Beaton, Lucy Beiro and Juani Valdes, completed the 15-mile ride in memory of his father.

Sylvester Director Stephen D. Nimer, M.D., and Vaughn Edelson, senior project manager in Sylvester's Office of Education and Training, lead cyclists in the 100-mile ride.

PARTNERING FOR ONE MISSION

STEEPED IN TRADITION AND CEREMONY, endowed chairs are the highest accolade a university can bestow upon a professor. Endowed chairs represent prestige and honor for the chairholders and the people and organizations whose names they carry. They help advance research, provide exceptional patient care, and attract and retain world-class talent. In 2022, Sylvester awarded endowed chairs to two outstanding faculty members who have distinguished themselves through their groundbreaking bodies of work.

I intend to use the Schultes' investment to explore new territories and ideas in our research to investigate how cancer cells interact with the tumor microenvironment and immune response for gastroesophageal cancers. I'm blessed and honored to be a part of Sylvester, to be working with and learning from so many visionary leaders in cancer research.

WAEL EL-RIFAI, M.D., PH.D.

John and Judy Schulte Senior Endowed Chair in Cancer Research

From his humble start as a University of Miami student to the pinnacle of his public relations career, John K. Schulte was a steadfast supporter of his alma mater. Together with his wife, Judy, they not only gave generously during their lifetime, but also arranged to support research and education after their passing.

Their legacy now lives on in perpetuity through their Senior Endowed Chair in Cancer Research, presented to Wael El-Rifai, M.D., Ph.D., also associate vice chair of the DeWitt Daughtry Family Department of Surgery, to expand his research to identify and develop novel therapeutic strategies for gastroesophageal cancers.

I am humbled and honored to receive this endowed chair. It is less about me and more about three amazing pillars of our community that have made this possible: the Harcourt M. and Virginia W. Sylvester Foundation, the Dolphins organization, and Sylvester Comprehensive Cancer Center. I am so grateful that they have chosen me to conduct this mission.

FRANK J. PENEDO, PH.D.

Sylvester Dolphins Challenge Cancer Living Proof Endowed Chair in Cancer Survivorship

In recognition of his accomplishments in the field of cancer survivorship and psychosocial oncology, Frank J. Penedo, Ph.D., was inducted as the inaugural holder of the Sylvester Dolphins Challenge Cancer Living Proof Endowed Chair in Cancer Survivorship. This unique chair, created through a remarkable partnership of the Harcourt M. and Virginia W. Sylvester Foundation and Dolphins Challenge Cancer, combines the efforts of many into a greater unified impact.

Dr. Penedo has dedicated his life to increasing the understanding that fighting cancer is a lifelong journey, with a series of emotional, physical, and social challenges that affect not only the patient but the family and caregivers as well.

(From left) Stephen D. Nimer, M.D.; Brian Smith; Jena Smith; Laura Sylvester; W. Jarrard Goodwin; Sharon Goodwin; Andy Trunk; Chris Malfitano; Jayne Malfitano.

SYLVESTER'S 30TH NAMING ANNIVERSARY CELEBRATION HONORS FAMILY'S PHILANTHROPY AND FORESIGHT

2022 marked the 30th naming anniversary of Sylvester Comprehensive Cancer Center.

To recognize the Sylvester family for their philanthropy and foresight, they were honored with a celebratory dinner and a tribute book that chronicles their legacy in the cancer center's history and its promise for the future. During the event, University of Miami President Julio Frenk offered his gratitude, calling the members of the Sylvester family incredible stewards of their legacy and an integral part of the University. As part of its strong partnership with the cancer center, the Harcourt M. and Virginia W. Sylvester Foundation has committed more than $62 million to date.

THE PAP CORPS CELEBRATED 70TH ANNIVERSARY SUPPORTING CANCER RESEARCH

Since its founding in 1952, The Pap Corps has donated more than $110 million to Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, including a historic $50 million pledge in 2016. To celebrate its 70th anniversary, an afternoon gala was organized at the Polo Club in Boca Raton on Nov. 15, 2022. During the luncheon event to pay tribute to the organization's impressive history, two special guests were honored: major donor Gerald Yass and Stephen D. Nimer, M.D., director of Sylvester Comprehensive Cancer Center.

Stephen D. Nimer, M.D., Beverly Berkowitz, Gerald Yass and Susan Dinter, Chair, The Paps Corps.

PARTNERING FOR ONE MISSION

Eileen Youtie

Mark and Janet Levy

Adam Carlin

GIFT ESTABLISHES EILEEN YOUTIE PREDISPOSITION SYNDROME INITIATIVE AT SYLVESTER

Eileen Youtie lived her life with passion and purpose. Never was that more evident than during her battle with breast cancer. Although she succumbed to the disease, her efforts will endure. Through the Eileen Youtie Predisposition Syndrome Initiative, her family and friends are now carrying on her legacy with a significant gift to Sylvester Comprehensive Cancer Center. A first-of-its-kind endeavor, the initiative will provide specialized, coordinated care to individuals diagnosed with hereditary cancer, as well as those who are predisposed and at higher risk due to inherited genetic mutations.

JANET AND MARK LEVY RECOGNIZED FOR GIFT TO ADVANCE CANCER AND NEUROLOGY RESEARCH

The patient reception area in the UHealth Concierge Medicine Clinic in Palm Beach it is now known as The Janet and Mark Levy Patient Reception Suite, in recognition for their $1 million donation to support innovative research in cancer and neurology. The Levys' generous gift includes $500,000 to Sylvester Comprehensive Cancer Center to create The Janet and Mark Levy Fund for Precision Oncology Research and Innovation. It will support advancements in precision oncology, including but not limited to research, technology, patient education, awareness, and communications, positively impacting patients in Palm Beach and South Florida.

HONORING A PROMISE

Adam Carlin first began supporting Sylvester in his late 20s. He promised to do more through the years and has kept his word. He and his wife, Chanin, gave a $2 million charitable gift that will help fund Sylvester's state-of-the-art Transformational Cancer Research Building (TCRB), which is scheduled to open in 2024. The 12-story facility will be a premier hub for cancer research, innovation and patient-centered care. In gratitude for the Carlins' contribution, the clinical research suite at the TCRB will be named the Adam and Chanin Carlin Clinical Research Suite.

Kristi and Dean Jernigan

JERNIGAN FAMILY FUNDS RESEARCH AND THERAPY AT SYLVESTER

Thanks to the tireless work of physician-researchers like those at Sylvester Comprehensive Cancer Center, there are 18 million cancer survivors in the United States. Kristi and Dean Jernigan's daughter is one of them. To express their gratitude to Sylvester Physician-in-Chief Craig Moskowitz, M.D., who successfully guided their daughter's treatment, they made a significant gift to the cancer center. It will help support the art and music therapy classes their daughter participated in as part of her healing process, as well as Dr. Moskowitz's research, which includes a pilot study with Tracy Crane, Ph.D., R.D.N., co-lead of the Cancer Control Research Program, to look into how non-medical lifestyle changes affect treatment outcome.

OUR DONORS IN 2022

3,209
DONATIONS FROM INDIVIDUALS, FOUNDATIONS, AND CORPORATIONS

995
FIRST-TIME DONORS

313
ALUMNI DONORS

381
DONORS INCREASED THEIR GIVING
FROM 2021

529
DONORS MADE TWO OR MORE DONATIONS

29%
OF DONORS
MADE ONLINE GIFTS

DONATIONS CAME IN FROM **37 STATES** AND **6 COUNTRIES** AROUND THE WORLD

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National Accreditation
Program for
Rectal Cancer

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Centers of Excellence

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Find out more at **sylvester.org**