

FINDING THE

POWER

2023 ANNUAL REPORT



UT Health
San Antonio
Mays Cancer Center



BRIDGING DISCOVERY AND CLINICAL CARE

On behalf of our faculty, researchers and staff, we are pleased to share with you the 2023 annual report for the Mays Cancer Center, home to UT Health San Antonio MD Anderson Cancer Center.



Patrick Sung, DPhil

When we reflect on our accomplishments as one of only four National Cancer Institute-designated Cancer Centers in Texas and the only one for the South Texas region, we recognize the positive rippling impact we have on every patient we treat even as we carry the burden of responsibility to find new therapies to combat every type of cancer within our communities.

Reflecting on our work in 2023, we see stories of hope and determination to approach the puzzle of cancer on all fronts. Our goal remains to rid the world of cancer, but in the daily in-between, we work to ensure our patients receive compassionate and personalized care.

Within these pages, you will learn about:

- A teenager working to eradicate cancer after his father died from the disease.
- The special bond between two friends and the lengths to which one will go to ensure a cancer-free life for the other.
- Researchers collaborating across disciplines to battle brain cancer, breast cancer and every kind of cancer in between.



Mark Bonnen, MD

Woven within these stories are common threads of hope, courage and truth. Our truth lies in the science we use to push the boundaries of what we know about cancer and its treatments to explore new discoveries we previously could not foresee.

As we move forward in 2024, we anticipate the opening of the UT Health San Antonio Multispecialty and Research Hospital. It is the first of its kind in San Antonio and will combine some of the most advanced technology and treatments for cancer. The sky bridge – both functional and symbolic – already joins the Mays Cancer Center with the hospital as a collaboration conduit that will bring together discovery and clinical care in wholly new ways.



Robert Hromas, MD FACP

While our first commitment is to the South Texas region we serve, the promise of our work extends to communities far beyond. Our hope is to impact all who bravely put one foot in front of the other on their individual cancer journeys and the family members and friends who support them and who also sometimes need a helping hand. Even as we strive to achieve a cure for every cancer, we acknowledge the power of the providers and caregivers who sacrifice so much for those in their care. This collective march toward a cure for cancer requires us all.

Patrick Sung, DPhil
Interim Director,
Mays Cancer Center

Director, Greehey Children's
Cancer Research Institute

Mark Bonnen, MD
Chief Medical Officer,
Mays Cancer Center

Robert Hromas, MD, FACP
Acting President,
UT Health San Antonio

TABLE OF CONTENTS

THE POWER OF INSIGHT 6

Mays Cancer Center is focused on translating its research into life-saving cancer care for all South Texans while addressing social determinants of health that adversely impact Hispanic communities in particular

THE POWER OF HOPE 12

Researchers are investigating multiple approaches to combat the deadliest form of brain cancer, giving patients and their families greater hope

THE POWER OF SOLUTIONS 22

Mays Cancer Center scientists are testing whether existing medications for conditions unrelated to cancer might contribute to successful outcomes for breast cancer patients

THE POWER OF INNOVATION 28

The innovation of Mays Cancer Center researchers is yielding significant inroads for the treatment of all cancers through unique research opportunities and expansion of clinical trial capacity

THE POWER OF COMPASSION 36

Two women share their journeys to seize power over a cancer diagnosis

THE POWER OF ACHIEVEMENT 46

A roundup of significant recent achievements for Mays Cancer Center and its investigators

LEADERSHIP AND NEW MEMBERS 54



ON THE COVER

What drives Mays Cancer Center researchers to commit countless hours to identifying breakthrough therapies to save and extend the lives of those living with cancer? How do providers and caretakers tirelessly focus on improving the strength and well-being of their patients? Where do cancer patients and their families summon the resolve to fight this disease on every front, day in and day out? Together, care teams, researchers, physicians, and patients and their families find the power from within and harness their collective energy to persevere in their journey to end cancer.



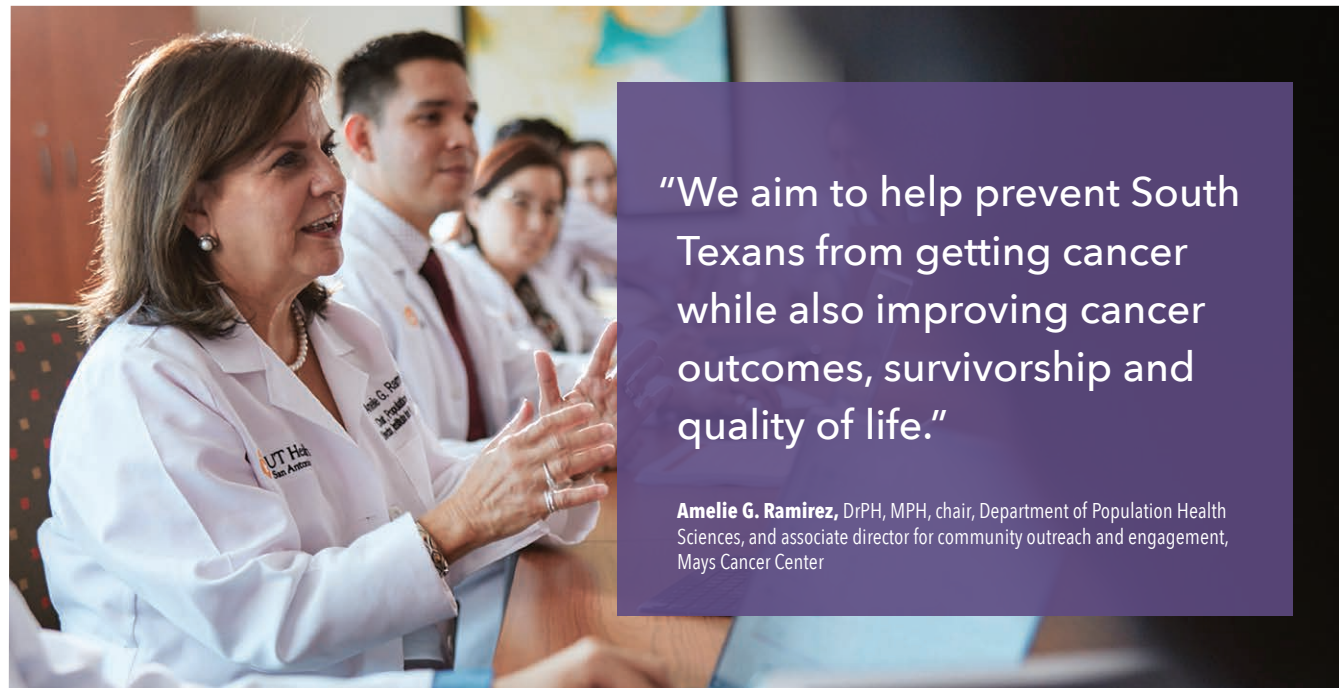
Amelie G. Ramirez, DrPH, MPH, chair, Department of Population Health Sciences, and associate director for community outreach and engagement, Mays Cancer Center

THE

WOMEN

OF INSIGHT

Mays Cancer Center is focused on translating its research into life-saving cancer care for all South Texans while addressing social determinants of health that adversely impact Hispanic communities in particular



“We aim to help prevent South Texans from getting cancer while also improving cancer outcomes, survivorship and quality of life.”

Amelie G. Ramirez, DrPH, MPH, chair, Department of Population Health Sciences, and associate director for community outreach and engagement, Mays Cancer Center

New health equity research center launches

Thanks to a four-year, \$4.08 million grant from the American Cancer Society, the Mays Cancer Center at The University of Texas Health Science Center at San Antonio launched the Avanzando Equidad de Salud: Latino Cancer Health Equity Research Center in February 2023.

The center, a response to the severe cancer burden facing Hispanics in South Texas, unites South Texas research scholars and the community to reduce health disparities across the cancer care continuum by targeting social determinants of health that prevent many within the Hispanic community from obtaining equitable care.

“Our new center conducts a unique combination of community-engaged research, training, patient assessment and advocacy to address the social determinants of health — such as access to health care, financial strain and food insecurity — that deter Latinos from equitable access to cancer care, prevention, early detection and treatment,” said Amelie G. Ramirez, DrPH, MPH. Ramirez, who leads the health equity program Salud America!, is chair of the health science center’s Department

of Population Health Sciences and director of its Institute for Health Promotion Research. She’s also associate director of the Community Outreach and Engagement Program at Mays Cancer Center.

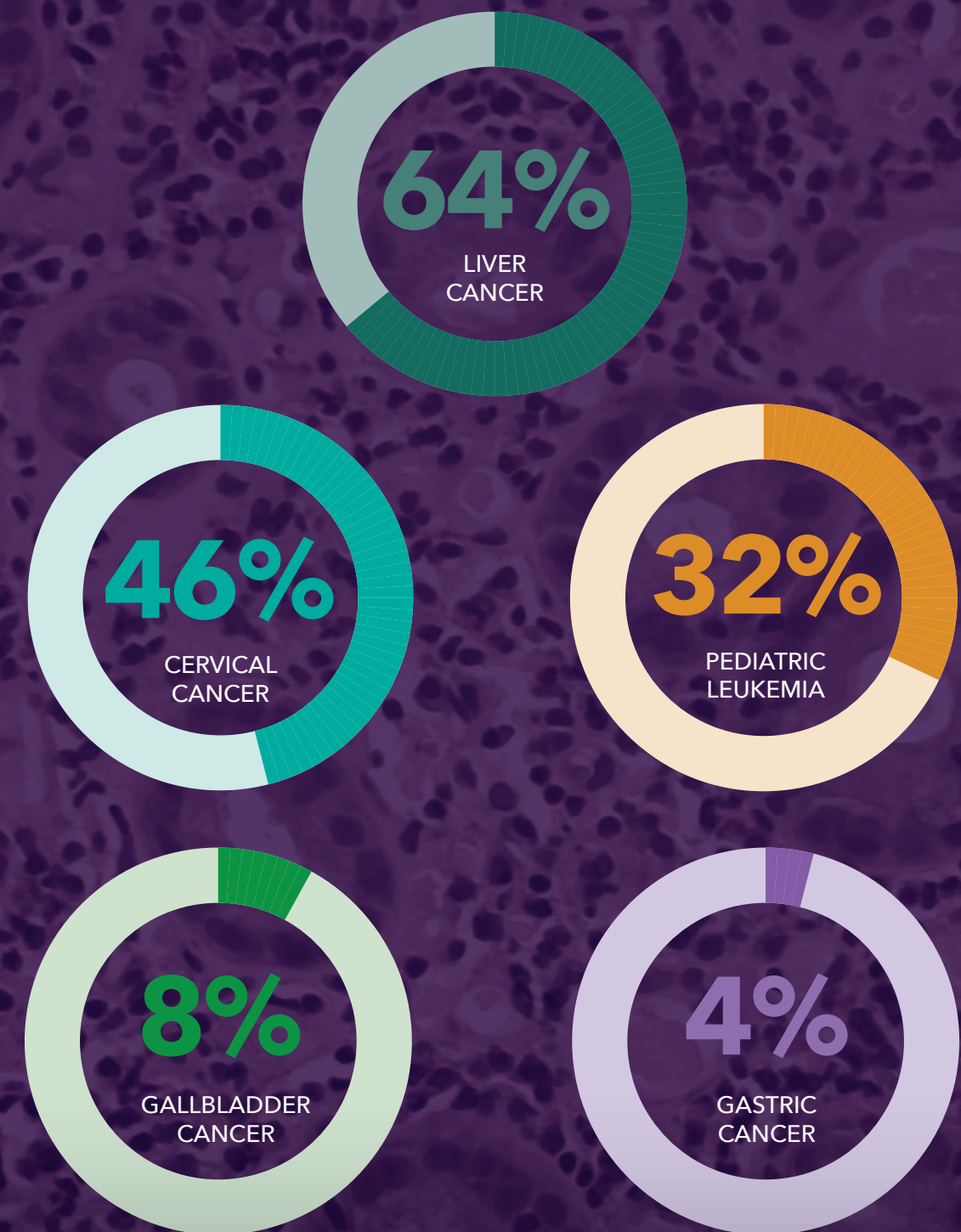
“We aim to help prevent South Texans from getting cancer while also improving cancer outcomes, survivorship and quality of life,” Ramirez said.

Why the center is needed

Nearly 5 million people — 69% of whom are Hispanic — live in South Texas, which stretches from San Antonio south to the Texas-Mexico border.

Hispanics in this region are at disproportionately greater risk of developing liver cancer (64%), cervical cancer (46%), gallbladder cancer (8%), gastric cancer (4%) and pediatric leukemia (32%) than peers in the rest of Texas and the U.S., according to The South Texas Health Status Review (2018), co-authored by Ramirez.

HISPANICS IN THIS REGION ARE AT DISPROPORTIONATELY GREATER RISK OF DEVELOPING:



AVANZANDO EQUIDAD DE SALUD: LAUNCHED IN FEBRUARY 2023

“The Avanzando Equidad de Salud Center will target these very inequities that are creating such a heavy cancer burden across South Texas,” Ramirez said.

What the center will do

The center aims to be the driving force in South Texas and the nation for building health equity, providing equitable cancer care, decreasing the burden of cancer and improving Hispanic health outcomes. To do so, the center will create a collaborative environment with the community to:

- Conduct two scholar-led cancer control research projects. The center will coordinate and provide leadership, mentoring and support for these two scholars.
- Assess cancer patients for social determinants of health. The center will change the electronic health record at UT Health San Antonio and

the Mays Cancer Center to systematically assess patients for social determinants of health.

- Engage research scholars and the community in education and advocacy for system and policy changes that improve health equity. For the center, Ramirez’s Salud America! will apply its national communication efforts locally to create peer-modeled content and advocacy toolkits for on-the-ground system and policy changes.
- Create a tailored mentoring program, webinar series and connection to local and national mentoring resources. The center will enhance the ability of research scholars and other early-to mid-career faculty researchers at the Mays Cancer Center to understand and integrate social determinants of health assessment and health equity in their future cancer research interventions in cancer prevention, screening, treatment and survivorship.

The Avanzando Equidad de Salud Center team

The center will be headquartered at the university, a Hispanic-Serving Institution, in alignment with its Mays Cancer Center, a National Cancer Institute-designated Cancer Center.

“We welcome the center as an opportunity to further elevate UT Health San Antonio’s culturally, regionally and contextually tailored cancer education, prevention, diagnosis and treatment by increasingly targeting the social determinants of health that drive health disparities in South Texas,” said Robert Hromas, MD, FACP, acting president, UT Health San Antonio. 🏠

The Avanzando
Equidad de
Salud Center
is the result of

1 of 89

extramural discovery science
grants funded through a

\$54.3M

investment by the
American Cancer Society

THE POWER OF HOPE

Researchers are investigating multiple approaches to combat the deadliest form of brain cancer, giving patients and their families greater hope

Ratna K. Vadlamudi, PhD, professor and vice chair for research, Department of Obstetrics and Gynecology, and co-leader of the Cancer Development and Progression Program, Mays Cancer Center



Molecule shows potential to combat tumor treatment resistance

The highly devastating brain tumor glioblastoma multiforme (GBM) has long posed treatment challenges, as effective therapies have remained elusive. Despite responding initially to treatment, GBM patients often experience therapy resistance, leading to low long-term survival rates.

Researchers at Mays Cancer Center and from the Department of Obstetrics and Gynecology at The University of Texas Health Science Center at San Antonio have made significant progress in studying a promising new molecule that inhibits the ability of GBM tumors to repair themselves.

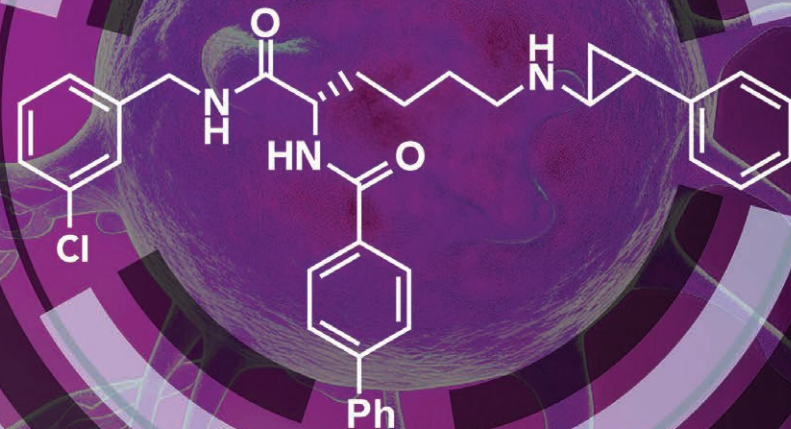
Published in the prestigious journal of *Neuro-Oncology* in January 2023, the study demonstrated that mice receiving this novel therapy in combination with chemotherapy showed extended survival compared to those receiving a single drug alone.

The molecule, known as NCD38, targets a specific subset of GBM cells called glioma stem cells. By disrupting their highly efficient DNA repair activity, NCD38 offers new possibilities for treatment.

“Glioma stem cells are notoriously difficult to treat,” said Gangadhara Sareddy, PhD, corresponding study author and a Mays Cancer Center investigator and associate professor of obstetrics and gynecology at the health science center.

Chemotherapy and radiation primarily damage the DNA of glioblastoma tumor cells, slowing tumor growth. However, glioma stem cells possess an elevated ability to repair this DNA damage, contributing to treatment resistance. NCD38 inhibits an enzyme called Lysine-Specific Histone Demethylase 1A (KDM1A), which plays a significant role in DNA repair within glioblastoma.

NCD38



“While mice in the non-treatment group succumbed to GBM within two to three weeks of implantation, those in the combination therapy group — NCD38 with temozolomide — survived four to five weeks.”

Gangadhara Sareddy, PhD, associate professor,
Department of Obstetrics and Gynecology



Gangadhara R. Sareddy, MD
Obstetrics and Gynecology



“This enzyme is highly expressed in glioblastoma, and patients with elevated KDM1A expression tend to exhibit poorer overall survival,” Sareddy explained.

The study involved implanting GBM tumors into mice, followed by randomization into treatment groups. The mice in the treatment groups were assigned to receive either NCD38, the chemotherapy drug temozolomide or a combination of both. A control group received a nonactive placebo.

The mice receiving the combination of NCD38 and temozolomide demonstrated the longest survival rates. By inhibiting KDM1A activity and interfering with the cancer’s DNA repair, NCD38 enhanced the cancer-killing effects of temozolomide.

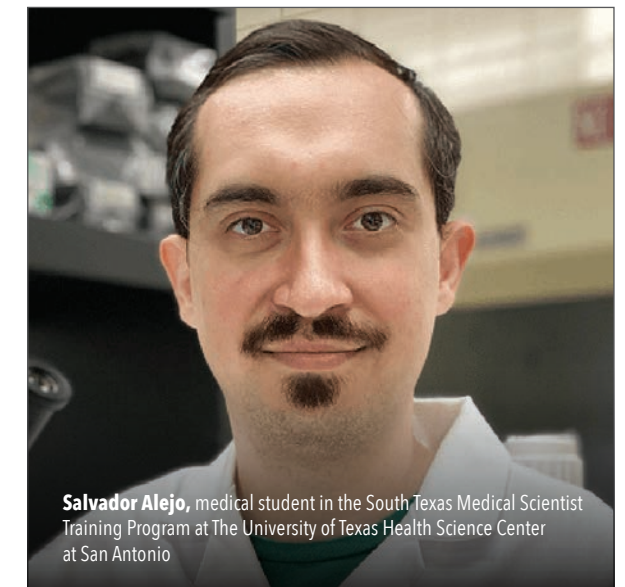
“While mice in the non-treatment group succumbed to GBM within two to three weeks of implantation, those in the combination therapy group — NCD38 with temozolomide — survived four to five weeks,” Sareddy said.

While the study is yet to be conducted in humans, the potential benefits observed in mice could translate into significant survival improvements of two to three years for patients.

“Identifying mechanisms that regulate DNA repair in glioma stem cells may unveil new paradigms

to curb GBM growth and recurrence, ultimately improving patient outcomes,” noted lead author Salvador Alejo, a medical student in the South Texas Medical Scientist Training Program at the health science center. His research focused on this topic.

Further studies are needed to evaluate the safety and efficacy of this treatment strategy. Nonetheless, promising results from this study provide hope for developing new strategies to combat GBM treatment resistance and pave the way for enhanced patient care. 🏠



Salvador Alejo, medical student in the South Texas Medical Scientist Training Program at The University of Texas Health Science Center at San Antonio



National Cancer Institute grant to make compounds to treat glioblastoma multiforme (GBM) tumors, an aggressive brain cancer associated with the worst overall survival rates among all human cancers

University of Texas team studies compounds aimed at brain cancer treatment

Scientists from Mays Cancer Center and from the Department of Obstetrics and Gynecology at The University of Texas Health Science Center at San Antonio, along with the Department of Chemistry at The University of Texas at San Antonio (UTSA), are using a \$3 million National Cancer Institute grant to make compounds they hope will treat glioblastoma multiforme (GBM) tumors, an aggressive brain cancer associated with the worst overall survival rates among all human cancers.

The grant follows previous NCI funding of \$2 million that supported lab studies yielding fundamental understandings needed to progress to drug development.

The new compounds mimic the activity of the sex hormone estrogen on a cell protein called estrogen receptor-beta (ER-beta). This critically important receptor is known to suppress cancer. Both males and females have estrogen, but females have higher levels. More men are diagnosed with GBM than women.

ER-beta suppresses cancer by activating thousands of genes that collectively have tumor-stunting effects. The small molecule that the research team is developing will uniquely bind, or attach to, ER-beta and enhance the activation of genes that suppress glioblastoma growth.

Neuro-oncologist Andrew Brenner, MD, PhD, a professor of medicine at the health science center who treats patients at the Mays Cancer Center, noticed the pattern of more men with GBM. To explore this further, Brenner approached Ratna K. Vadlamudi, PhD, a professor in the Department of Obstetrics and Gynecology and co-leader of the cancer development and progression program at Mays Cancer Center.

“Estrogen signaling is one of the main topics of study in the OB-GYN field. Dr. Brenner said we need to study explanations for the gender difference. Over time, we narrowed it down to ER-beta, and we brought in UTSA chemists to make molecules that mimic estrogen activity at ER-beta

without the estrogen side effects, which include breast tenderness and vaginal bleeding in women and fatigue and sweating in men,” Vadlamudi said.

Stanton McHardy, PhD, professor in the Department of Chemistry at UTSA, said the project has been an extremely efficient and productive collaboration between the Vadlamudi, Brenner and McHardy laboratories. McHardy is director of the Center for Innovative Drug Discovery, a joint initiative of UTSA and the health science center that is supported by funding from the Cancer Prevention and Research Institute of Texas.



Stanton McHardy, PhD, professor, Department of Chemistry, The University of Texas at San Antonio

“At UTSA, our role will be to design, synthesize and optimize small-molecule inhibitors of ER-beta,” McHardy said. “Our ultimate goal is to identify a structurally novel ER-beta agonist, a molecule that acts like estrogen, which can be developed clinically.”

Brenner, co-leader of the Experimental and Developmental Therapeutics Program at the Mays Cancer Center, conducted studies that showed the compounds enter the brain. This is an important consideration, given that the brain is protected from foreign substances by a blood-brain barrier, said Brenner. Any drug that treats GBM will have to penetrate this natural barrier.

“Dr. Brenner has proven that our compounds can do that. This research proposal is based on strong preliminary data showing that ER-beta exerts tumor-suppressive functions in glioblastoma,” Vadlamudi said. “This proposal will develop novel ER-beta drugs that promote tumor suppression, leading to a new therapeutic modality to treat GBM.”

The scientists will go through iterations of ER-beta agonists to develop a novel clinical strategy with a goal to move forward with completion of validation using preclinical models and then to test the molecules in clinical trials in two to three years, Vadlamudi said. 🍷

Mays Cancer Center conducts groundbreaking glioblastoma research

Mays Cancer Center at The University of Texas Health Science Center at San Antonio recently conducted a clinical trial combining two drugs in patients with recurrent, high-grade glioblastoma multiforme (GBM). The Mays Cancer Center, one of four National Cancer Institute-designated Cancer Centers in Texas, is the only cancer center in America to conduct this trial.

Andrew Brenner, MD, PhD, professor of medicine at the health science center and a medical oncologist specializing in both breast cancer and malignancies of the brain and spinal cord, initiated the clinical trial.

“Glioblastoma is the most common and, unfortunately, the most aggressive primary brain tumor,” Brenner said. “The average survival for a newly diagnosed GBM is 20 months, and that’s only a four-month improvement in survival from 2005 when we began following surgery with chemotherapy and radiation.”

Glioblastoma has claimed the lives of many well-known figures. U.S. Sen. Edward M. Kennedy died of GBM in 2009. Beau Biden, son of U.S. President Joe Biden, succumbed to the disease in 2015. And U.S. Senator John McCain lost his battle with GBM in 2018.

“That is the landscape in which we work,” said William Kelly, MD, assistant professor of medicine at the health science center and a neuro-oncologist at Mays Cancer Center. “GBM comes back after treatment in almost all patients, and, when it does, survival is extremely poor. There is a desperate need for more therapies to treat these patients.”

For the study, the Mays Cancer Center enrolled and treated 25 patients with GBM. Treatment consisted of a standard-of-care chemotherapy called bevacizumab (brand name Avastin) combined with a small-molecule fatty acid synthase inhibitor called TVB-2640 (Denifanstat), since glioblastoma tumors rely on their ability to make fatty acids for growth.

Side effects such as rashes, dry eye and fatigue were mild, and researchers noted an improvement in six-month, progression-free survival.

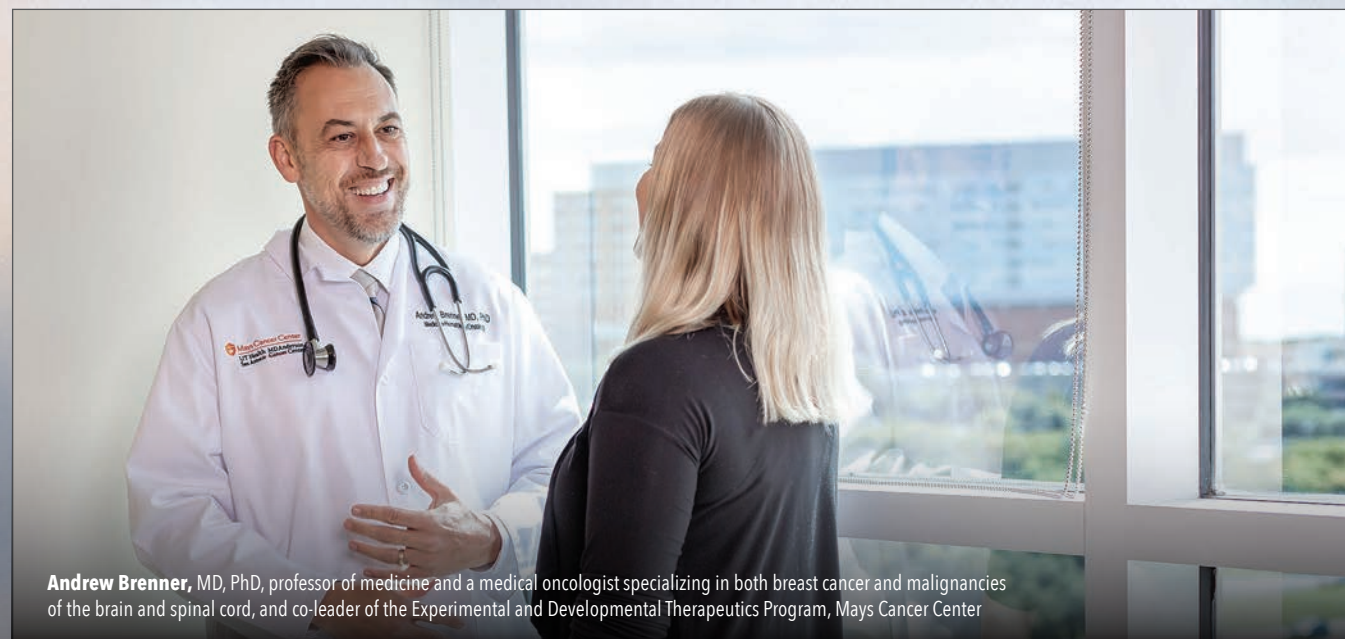
No current therapy improves survival in recurrent GBM. The overall survival of participants in the Mays Cancer Center study was not statistically significant compared to historical controls — patients with high-grade GBMs who weren’t in the study and were treated with bevacizumab only. However, the fact that the drug combination was able to stop cancer progression for six months in a greater number of patients with high-grade GBM was noteworthy, according to Kelly.

“This gives us hope, although we are always simultaneously realistic about the disappointing history of treating these diseases,” Kelly said.

Results of the study were published in *Clinical Cancer Research*, a journal of the American Association for Cancer Research. 📖

“The fact that the drug combination of bevacizumab (brand name Avastin) combined with a small-molecule fatty acid synthase inhibitor called TVB-2640 (Denifanstat) was able to arrest cancer progression for six months in a greater number of patients with high-grade GBM was noteworthy.”

William J. Kelly, MD, assistant professor of medicine and a neuro-oncologist at Mays Cancer Center



Andrew Brenner, MD, PhD, professor of medicine and a medical oncologist specializing in both breast cancer and malignancies of the brain and spinal cord, and co-leader of the Experimental and Developmental Therapeutics Program, Mays Cancer Center



William J. Kelly,
Medicine Hematology/Oncology

OF SOLUTIONS

Mays Cancer Center scientists are testing whether medications for conditions unrelated to cancer might contribute to successful outcomes for breast cancer patients

UT Health
San Antonio
Long School of Medicine

Robert Hromas, MD, FACP
Medicine

Robert Hromas, MD, FACP, acting president, UT Health San Antonio, and
Kimi Kong, PhD, associate professor of medicine

“The patient is always the focus of the work being done in both the lab and the clinic, as it should be. Curing cancer in a lab is great, but it’s not the ultimate goal. Curing cancer in patients is.”

Virginia G. Kaklamani, MD, professor of medicine and leader of the breast oncology program at Mays Cancer Center

Repurposed drug brings new hope for breast cancer patients

Could a drug prescribed for transplant recipients also help some women beat breast cancer? Impressive new findings point to this possibility, according to research conducted at The University of Texas Health Science Center at San Antonio.

Kimi Kong, PhD, and Robert Hromas, MD, FACP, who made the observations, are collaborating with Virginia Kaklamani, MD, DSc, to offer a clinical trial of the drug cyclosporin at the Mays Cancer Center.

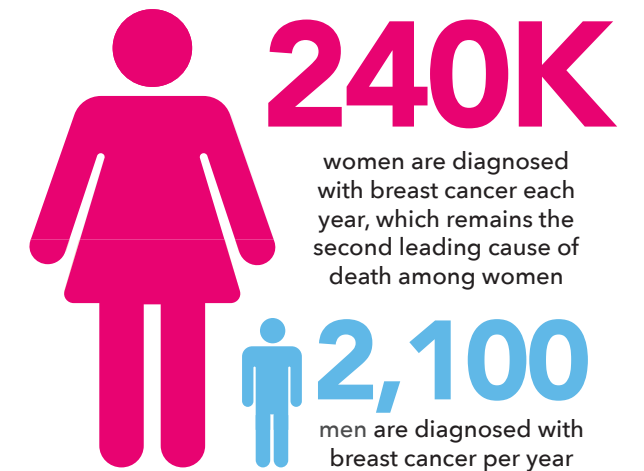
Kong, associate professor of medicine, and Hromas, acting president of UT Health San Antonio, found that cyclosporin kills a specific type of cancer cell. They immediately contacted Kaklamani, leader of the Breast Oncology Program at the Mays Cancer Center.

In the cyclosporin study, the cancer center’s patient care and scientific discovery missions are powerfully fused. The hope is to discover another treatment option to help the hundreds of thousands of individuals — predominantly women — who are diagnosed with breast cancer each year in the U.S., including more than 20,000 new cases annually in Texas.

Cyclosporin has a history of safety in humans dating back four decades. The U.S. Food and Drug Administration approved the drug in 1983 to prevent the rejection of transplanted organs. Kaklamani’s challenge is to define the best use of this drug in a new population of patients.

As findings are made by Kong, Hromas and the research team, they are communicated to Kaklamani and the clinical team at the Mays Cancer Center.

ACCORDING TO THE CENTERS FOR DISEASE CONTROL AND PREVENTION,

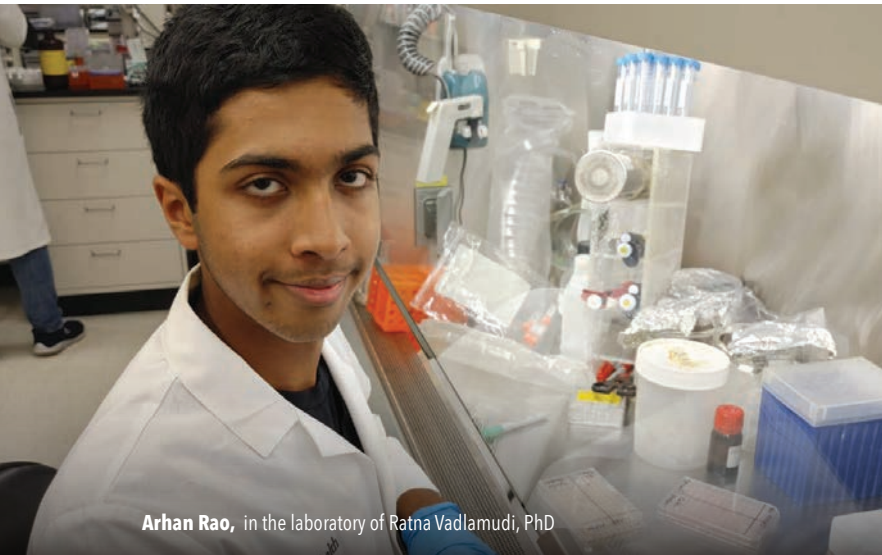


Over the next several years, Kaklamani will study cyclosporin in women newly diagnosed with one type of inherited breast cancer who have not yet received any treatment.

“We know the dose for transplant patients, but we are not using the drug for transplantation,” she said. “Should we be using the same dose for our cancer patients? This study will answer many questions.”

The clinical trial is supported by funding from the National Institutes of Health and the Mays Cancer Center.

“The patient is always the focus of the work being done in both the lab and the clinic, as it should be,” Kaklamani said. “Curing cancer in a lab is great, but it’s not the ultimate goal. Curing cancer in patients is.”



Arhan Rao, in the laboratory of Ratna Vadlamudi, PhD



Arhan Rao, (second from the far right), and Ratna Vadlamudi, PhD (far right), reviewing Rao's lab observations with Vadlamudi's team.

'We have an obligation to help others'

As Arhan Rao watched his grandfather become ill with cancer and die, a goal formed in the teenager's mind. He would become an oncology physician and researcher and discover a new generation of cancer treatments. While still in high school, Rao learned the fundamentals of laboratory research during his summer internships at The University of Texas Health Science Center at San Antonio.

Now, clinical trials based on Rao's lab observations about an existing drug are underway in breast and brain cancer at the Mays Cancer Center, one of only four National Cancer Institute-designated Cancer Centers in the state. Imipramine, a drug approved by the U.S. Food and Drug Administration to treat depression, is slowing tumor growth in the human breast cancer study at the center.

Rao is second author on a paper published in the peer-reviewed journal *Cancer Letters*. In mouse and human tumor cells, imipramine inhibited triple-

negative and estrogen receptor-positive breast cancers that are notoriously difficult to treat in people.

"While researching initiatives from the National Cancer Institute, I found that the NCI has given priority to repurposing FDA-approved drugs as cancer treatments," Rao said. "These drugs will be safe, as they are used to treat other diseases. If the same drugs work to kill cancer cells, then they can be used in clinics right away."

Rao discussed the idea with his faculty mentor, Ratna Vadlamudi, PhD, professor of obstetrics and gynecology at the health science center and co-leader of the Cancer Development and Progression Program at the Mays Cancer Center. The Vadlamudi lab hosted Rao while he was a student attending high school in San Antonio's Northside Independent School District.

"Dr. Vadlamudi mentioned that an FDA-approved drug library exists and that I could test those

drugs in an unbiased way to find out if they work," Rao said. "I began screening candidate drugs and discovered that imipramine was able to stop the growth of cancer cells."

"When human patients receive chemotherapy and other treatments, they may develop depression," Vadlamudi said. "Imipramine is one of the antidepressants prescribed for them, and the NCI library indicated that it might have anticancer activity. [Rao] was curious to delve into this."

Rao's explorations provided evidence that imipramine has potent anticancer activity. By reducing estrogen signaling, imipramine stunts the growth of estrogen receptor-positive breast cancers, he found. The drug also interferes with DNA repair, which curbs the ability of triple-negative breast cancers to proliferate, the lab discovered.

The breast cancer clinical trial is directed by Virginia Kaklamani, MD, leader of the Breast Oncology Program at the Mays Cancer Center and professor of medicine at the health science center. The team gave imipramine to women who had been newly diagnosed with breast cancer and awaited surgery.

"We typically have a window of two to three weeks or so between the diagnosis and the surgery,

and this is an opportunity for us to give patients a drug and test to see how it does on the cancer tissue," Kaklamani said.

The care team obtains a biopsy as part of the initial diagnosis and another tissue specimen during surgery.

"This affords two time points so we can see how the cancer has changed with the imipramine treatment without having to subject women to more biopsies," Kaklamani said. "We did that in 15 patients, and overall, we were able to show that imipramine can decrease the tumor growth."

This small pilot study, funded by the Mays Cancer Center, is a preliminary experiment to show that imipramine is an active drug in breast cancer, Kaklamani said.

Rao, who spent summer and holiday breaks at the lab, intends to pursue a career in medicine and improve the lives of patients.

"I believe, as a society, we have a moral obligation to help others," Rao said. "Many cancer patients relapse after a couple of years, and that is so incredibly sad. We need to decrease that. We need to help researchers and society in general develop additional safe and effective treatment options. This project with imipramine is a part of that." 🏠



THE **POWER** OF INNOVATION

The innovation of Mays Cancer Center researchers is yielding significant inroads for the treatment of all cancers through unique research opportunities and expansion of clinical trial capacity

Study shows immunotherapy may lower recurrence of advanced melanoma



“The results are significant for patients who are diagnosed with high-risk melanoma and changes the standard of care. It demonstrates pembrolizumab is best administered before and after surgery.”

Monte Shaheen, MD, professor of oncology, Division of Hematology and Oncology, and director of the immunotherapy program at Mays Cancer Center



Monte Shaheen, MD, a melanoma expert at Mays Cancer Center at The University of Texas Health Science Center San Antonio, was part of a team of investigators that conducted a phase 2 clinical trial funded by the National Cancer Institute to determine the efficacy and safety of administering the immunotherapy drug pembrolizumab before and after surgery in high-risk melanoma patients.

The results of the clinical trial, published in *The New England Journal of Medicine*, show that participants with stage 3 or stage 4 melanoma who were given pembrolizumab before and after surgery (neoadjuvant-adjuvant therapy) had significantly lower risks of recurring cancer than participants who received the drug after surgery only (adjuvant-only).

Neoadjuvant therapies are delivered before the main treatment to help reduce the size of a tumor or eradicate cancer cells that have spread. Adjuvant therapies are delivered after the primary treatment to destroy the remaining cancer cells. For this study, patients showed favorable outcomes for the neoadjuvant-adjuvant pembrolizumab in advanced melanoma.

The clinical trial was conducted at several NCI-designated Cancer Centers across the nation. Shaheen, a professor of oncology at the health science center and director of the immunotherapy program at Mays Cancer Center, was one of the principal investigators of the clinical trial.

Investigators enrolled 345 participants with stage 3 or stage 4 melanoma. Participants aged 18 to 90 randomly received either 200 milligrams of pembrolizumab every three weeks following surgery (adjuvant-only) for a total of 18 doses, or 200 mg of pembrolizumab every three weeks for three doses leading up to surgery (neoadjuvant-adjuvant), then an additional 15 doses following surgery.

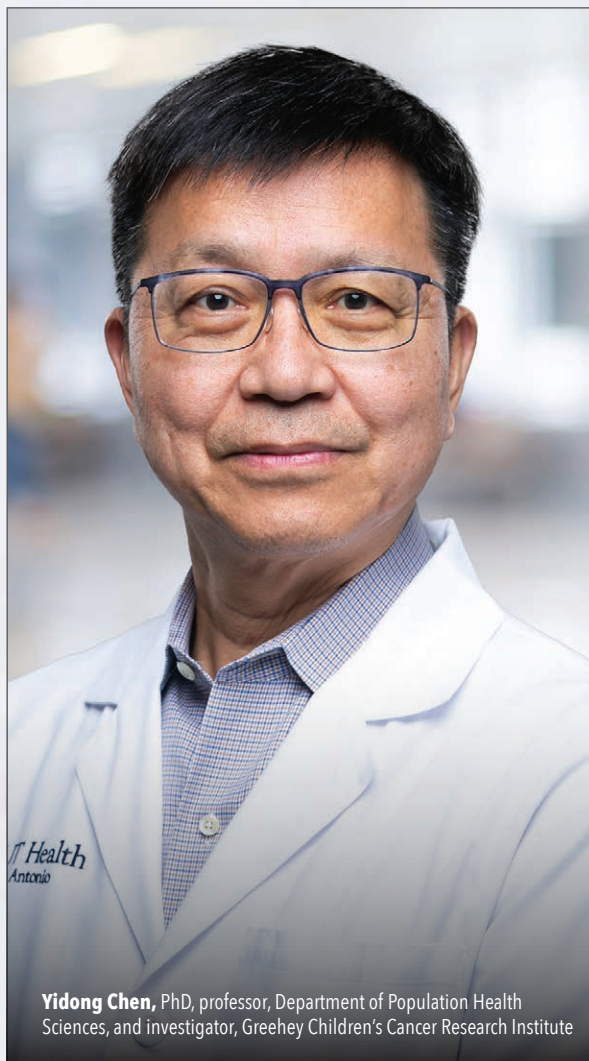
Among the participants with stage 3 or stage 4 melanoma, event-free survival was significantly longer for those who started with the neoadjuvant-adjuvant therapy, and no new toxic effects were identified. Event-free survival is defined as the time after treatment when a group of clinical trial participants did not have recurring cancer or conditions.

“The results are significant for patients who are diagnosed with high-risk melanoma and changes the standard of care. It demonstrates pembrolizumab is best administered before and after surgery,” Shaheen said.

“At Mays Cancer Center, our multidisciplinary team provides high-quality comprehensive care for our patients with melanoma. We continue to work to bring novel immunotherapy options to the San Antonio community and South Texas.” 🏡

CPRIT awards nearly \$8M for research infrastructure

The Cancer Prevention and Research Institute of Texas (CPRIT) announced two awards totaling nearly \$8 million to support research infrastructure at The University of Texas Health Science Center at San Antonio. Two core research facilities at UT Health San Antonio's Greehey Children's Cancer Research Institute will be expanded.



Yidong Chen, PhD, professor, Department of Population Health Sciences, and investigator, Greehey Children's Cancer Research Institute

A \$3.9 million CPRIT award enhances the Cancer Genome Sequencing and Computation Core directed by Yidong Chen, PhD, professor in the Department of Population Health Sciences and investigator with the Greehey Institute.

"This funding is an extension of a previous CPRIT award," Chen said. "CPRIT's generous, continuing support will enable our facility to move beyond lab research discoveries into translational clinical research. We will acquire additional equipment to propel these efforts."

Investigators established the core facility through a \$3.6 million CPRIT award in 2016.

Another \$3.9 million CPRIT award supports the Texas Pediatric Cancer Testing Core in the Greehey Institute. The principal investigator is Peter Houghton, PhD, professor in the health science center's Department of Molecular Medicine and former director of the Greehey Institute.

Since 2010, CPRIT has awarded \$138 million to the health science center's cancer research and prevention initiatives. The new awards have the potential to help adults with cancer as well.

The Greehey Institute is one example of multiple streams of care and research in cancer that contribute to the overall mission of the Mays Cancer Center, a National Cancer Institute-designated Cancer Center.

"The leadership and contributions of Dr. Peter Houghton as our former institute director and Dr. Yidong Chen as our lead computational biologist have helped render the Greehey Institute a center of excellence in pediatric cancer research in the state of Texas and nationally," said Patrick Sung, DPhil, director of the Greehey Institute. 🍷



Peter Houghton, PhD, professor, Department of Molecular Medicine

New hospital will bring advanced research and patient care under one roof

Surgeries in multiple specialties, new services for the region — including cellular therapies, such as stem cell transplants and CAR T-cell therapy — and access to the latest clinical research trials are drawing closer to reality as construction of the \$471 million UT Health San Antonio Multispecialty and Research Hospital reached several milestones this past year.

“Admitting hospital patients who are part of clinical research efforts is not done in our community now,” said William L. Henrich, MD, MACP, former president of The University of Texas Health Science Center at San Antonio, during the October 2022 topping-out ceremony of the hospital. “This will be a unique aspect of the truly comprehensive care our hospital provides for the region and will maximize patients’ opportunity for healing and recovery. The focus, the ultimate objective, is improved patient outcomes.”

Continuing his remarks at the ceremony, Henrich noted that the hospital will be the predominant location of adult oncology services and other surgical specialties and clinical research. “Here we will create a culture that is caring and passionate about taking care of the patient. This will be a hospital worthy of The University of Texas name,” Henrich said.

A recent significant milestone was the completion of the skybridge that will serve as a vital link, connecting the new hospital to the Mays Cancer Center. The skybridge is approximately the length of 1.4 football fields, or about two city blocks. It will provide an efficient pathway for medical care, education and research, plus high-tech capabilities enabling lab samples and advanced technology to be delivered safely, securely and quickly between the hospital and cancer center. 🏠

“This will be a world-class facility with technology and ambience backing up superb medical teams.”

William L. Henrich, MD, MACP, former president, UT Health San Antonio, October 2022

OF COMPASSION

Two women share their
journeys to seize control
over a cancer diagnosis

Tonya Randolph, RN, senior registered
nurse at Mays Cancer Center





Tonya Randolph, RN, senior registered nurse at Mays Cancer Center; and Jessica James, RN

Tonya Randolph: a caregiver's journey

By Norma Rabago

Tonya Randolph, RN, senior registered nurse at the Mays Cancer Center, carries more than a year's worth of heart-breaking memories on her phone's calendar. Among them:

- Jan. 15, 2022: Her best friend and fellow traveling nurse, Jessica James, discovered a seemingly insignificant red line on her arm.
- March 14, 2022: Surgery to remove a tumor on James' ovary.
- March 18, 2022: A stage 4 cancer diagnosis.

The calendar entries mark each moment, but they inadequately document the terror of traversing more than 700 miles via a camper from New Mexico to Texas against the advice of a doctor, the discovery of more ailments, the frustration of painful treatments, the loss of jobs and the love of a best friend through faith and compassionate care.

It's a journey that continues to this day as James, once cancer-free, faces a recurrence of cancer in a lymph node and intense radiation treatment.

Randolph and James met over eight years ago while working as nurses. The two developed a fast friendship founded in their love of nursing, traveling and the outdoors. After a hiking trip while on assignment in New Mexico, they noticed a small red line on the inside of James' forearm.

"It was a little mark that looked like she leaned against a table. We watched it for several days, and it slowly crept up her arm. I thought it might be a blood clot," Randolph said.

A visit to an emergency room confirmed a blood clot, while further scans showed a series of strokes, a tumor on her right ovary, liver necrosis and spleen and renal infarctions — areas of dead tissue resulting from inadequate blood supply.

After an ultrasound and a five-day stay in the hospital, the duo was told James didn't have cancer, then quickly told she did have cancer. The confusion led to a decision to move back home to San Antonio where they could lean on family members for support and seek treatment.

Randolph packed up their camper, and with the help of James' twin sister, a respiratory therapist, and her sister-in-law, a paramedic, they began a two-day, 700-mile journey home.

"I thought those were the worst two days of my life. But it got worse," Randolph said.

A harrowing month

Within a few days of arriving home, and with the help of family members, James had appointments with a gynecologic oncologist and gastroenterologist. During her meeting with a gastroenterologist, James complained of stomach pain and became violently ill. An emergency room visit revealed elevated cardiac enzymes and, later, a mass near James' heart.

The cardiologist pulled Randolph outside the room and told her the mass near James' heart was inoperable.

For 30 days, Randolph cared for James at home, draining her lung, which had developed a pulmonary effusion — or liquid in her lung — while treating the mass near her heart with medication. During those 30 days, with James unable to have any surgeries for the various ailments until the mass near her heart was gone, Randolph did what she could to help. She changed their diet to include only organic foods and read a book that recommended carrots to fight cancer. Daily, she prepared five pounds of carrot juice for James to drink.

"You feel like you are going crazy. But it comes down to, 'How much do you want to live?' That was the question. I remember asking Jessica to stay with me, to do whatever you can to stay with me," she said. "I would literally knock potato chips from her mouth if the label said it might cause cancer. I did what I could, and she was determined to do what she could."

After 30 days, the mass near James' heart was gone and she was cleared for surgery to remove the tumor on her ovary. The surgery occurred March 14, two months after the initial visit to the emergency room in New Mexico.

"When we got cleared for surgery, we still didn't have a definitive diagnosis of cancer. She had multiple biopsies, but they were inconclusive and showed atypical cells but not cancer. It was frustrating," Randolph said.

The tumor was removed, and James and Randolph received confirmation of stage 4 ovarian cancer.

"I remember thinking this is the worst day of my life," Randolph said.

However, the other ailments plaguing James — liver necrosis and spleen and renal infarctions — had spontaneously disappeared. After the diagnosis, the duo gathered family members and decided to take a short vacation before the cancer treatments began.

"We escaped to the beach and took family photos, just in case it was the last time," Randolph said.

At another medical facility, James was treated with chemotherapy and radiation. After a painful treatment of brachytherapy, James refused to go through the radiation treatment again. They then chose to move her care to Mays Cancer Center at UT Health San Antonio.

Peace at last

"When we met with the doctors at Mays, Jessica and I felt a sense of peace," Randolph said. "We hadn't felt that kind of peace in close to a year."

Randolph met Elizabeth Peche, RN, a nurse in the Mays Cancer Center's radiation oncology department. At their first meeting, Peche looked Randolph directly in the eyes and asked a simple question: "How are you doing?" Randolph burst into tears.

"She stopped looking at the diagnosis and looked at the people in front of her. I couldn't even answer," she said.

Peche said the empathy she felt for Randolph and James came naturally.

"I knew that they had already been through a lot. It's human nature, and I cared about how Tonya was doing. I couldn't not ask, because a patient's support system needs support, too," she said.

That show of empathy permitted Randolph to finally leave James' side for the first time since their cancer journey began.

"I could breathe and I felt it was OK to trust someone else with Jessica's care. I felt peace. I knew she was going to be OK, and I knew no one here was going to hurt her," Randolph said.



Jessica James, RN; Mark Bonnen, MD, physician-in-chief, Mays Cancer Center; and Tonya Randolph, RN, after completing the center's 2024 Give Cancer the Boot Survivorship 5K and 1-Mile Walk



Throughout their journey, Randolph tried to find moments to maintain a sense of normalcy despite the many stressors they faced. They went for walks when James was well enough to venture outside, and after each round of chemotherapy, they enjoyed night fishing, a favorite pastime.

"For both of us, it was important to focus on what we still could do," she said.

Giving back

As Randolph experienced the compassion of James's care team, especially during brachytherapy treatment, she chose to apply for a job at the

Mays Cancer Center. Today, she is working as an oncology clinic nurse and pays back the kindness and empathy shown to her and James.

"When we walked through the [Mays Cancer Center] doors, I felt peace, and I want to give that back to other families. The patient needs it. The family needs it," Randolph said. "As a nurse, I try to take every ounce of weight they have on their shoulders and put that on me. If that means you need to cry on me or it means you need to hand me a stack of medical bills or you need me to make a call to your job — whatever you need, let me give it to you. That's what I want to do." 🍷

"As a nurse, I try to take every ounce of weight they have on their shoulders and put that on me. If that means you need to cry on me or it means you need to hand me a stack of medical bills or you need me to make a call to your job — whatever you need, let me give it to you. That's what I want to do."

Tonya Randolph, RN, senior registered nurse at Mays Cancer Center



Clinical trial gives women with gene mutation power over disease

By Norma Rabago

After her aunt died and her sister successfully endured ovarian cancer treatments, Juana Padron, a 40-year-old mother of four, chose to have a genetic test at the recommendation of her primary care physician.

Although her extended family members were opposed to the test, Padron moved forward and discovered she carried a BRCA1 gene mutation, which increased her chance of developing certain cancers.

“[My family] told me, ‘What can you do? If you get cancer, then you get cancer. It’s better not to know,’” Padron said. “I prefer to know. If I can prevent it from happening, I will do whatever I need to do.”

Padron’s next step proved even more alarming for her family; she chose to participate in a clinical trial.

Georgia McCann, MD, a gynecologic oncologist at Mays Cancer Center and chief of the Division of Gynecologic Oncology at The University of Texas Health Science Center at San Antonio, said the risks are high for developing ovarian cancer if the mutation is present.

“Women carrying this mutation have a 39% to 58% lifetime risk of ovarian cancer. This is very high in comparison to the average lifetime risk of 1.2%,” McCann said.

Typically, to reduce their risk of ovarian cancer, women with the mutation can have their ovaries and fallopian tubes surgically removed between the ages of 35–40 once they have completed childbearing. Unfortunately, removal of the ovaries results in early surgical menopause for these women — a condition with its own set of challenges.

“Menopause can result in mood changes and weight gain. The estrogen made by ovaries is also important for bone and brain health,” McCann said. “So, as you can imagine, many women aren’t excited about choosing surgical menopause at such a young age.”

McCann leads a clinical trial comparing two different surgical options for women carrying the genetic mutation. The non-randomized trial gives participants the choice to have the standard removal of ovaries and fallopian tubes or the option of surgical removal of the fallopian tubes followed later by surgical removal of the

“Ovarian cancer is a devastating diagnosis. Knowing about a mutation that increases your risk of ovarian cancer is empowering.”

Georgia McCann, MD, gynecologic oncologist at Mays Cancer Center and chief of the Division of Gynecologic Oncology



ovaries closer to the age of natural menopause. The option is based on data suggesting that some ovarian cancers start in the fallopian tubes.

“If the origin of a lot of ovarian cancers, especially in BRCA1 patients, is the fallopian tubes, then the question is, can we offer women a staged surgical procedure,” McCann said.

According to the American Cancer Society, over 19,000 women will receive an ovarian cancer diagnosis in 2023. Of those, 25% will be the result of a gene mutation.

Padron learned about the trial through her primary care physician and was the first to sign up. With BRCA1 results and intense menstrual cycles resulting in anemia, Padron hoped to find relief and peace of mind.

“More than anything, I wanted to tell my daughters and my family that we have this

mutation in our family so they can do something to prevent getting cancer,” she said.

McCann said giving women the choice of surgical ovarian cancer risk reduction gives them power over the potential of developing the disease.

“Ovarian cancer is a devastating diagnosis. Knowing about a mutation that increases your risk of ovarian cancer is empowering,” McCann said. “Knowledge is power, and the information allows you to do something to make a difference for you and your family.”

Padron chose to have both her fallopian tubes and her ovaries removed. She said she encourages others to participate in clinical trials.

“If I didn’t participate in the study, how would my daughters know what could happen to them?” she said. 🍀

MAYS CANCER CENTER RECEIVES A **\$300K** GRANT TO BOOST INDIVIDUALIZED, TIMELY CARE

The Mays Cancer Center at UT Health San Antonio has been awarded a \$300,000 grant from the American Cancer Society to enhance individualized, timely and equitable access to care for cancer patients and their families.

The local effort will feature the use of an innovative mobile app in collaboration with Rakshit Sharma, MD, head of the digital health company Care4ward Inc., to provide nutritional support and real-time symptom management to patients undergoing anti-cancer treatment, particularly the underserved and those living long distances from the cancer center.

The grant is known as a “Navigation Capacity-Building Initiative Grant,” referring to the use of patient navigators such as registered nurses with oncology-specific clinical knowledge who help guide patients through health care systems with the resources they need. The American Cancer Society sees patient navigation as critical to addressing barriers to care.

The grant program, implemented by the Mays Cancer Center, will provide cancer patients with continuous access to dietary and symptom support.



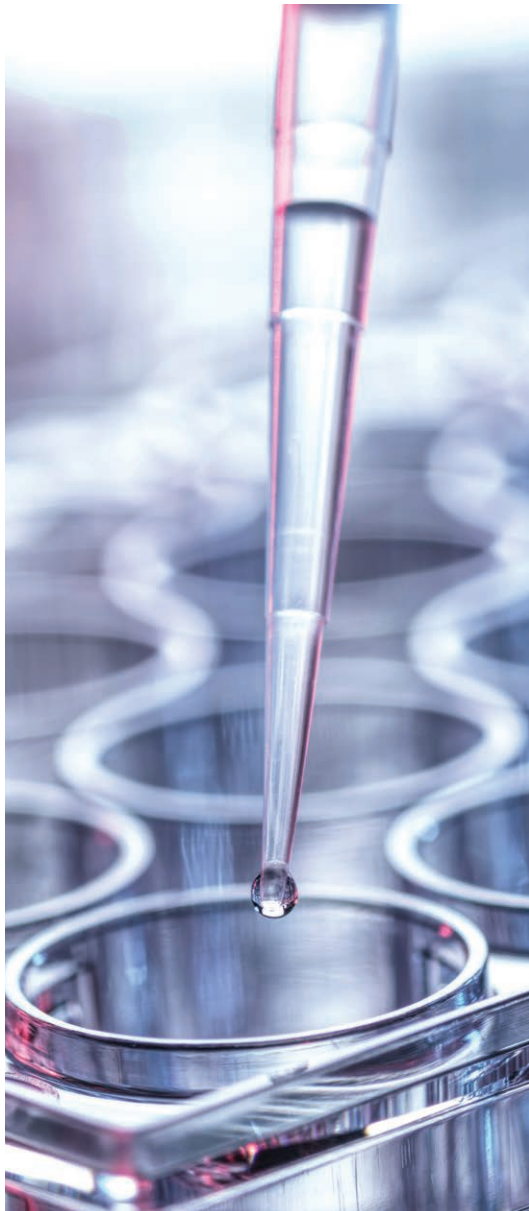


THE POWER

OF ACHIEVEMENT

A roundup of significant recent achievements for Mays Cancer Center and its investigators

Reuben S. Harris, PhD, professor and chair,
Department of Biochemistry and Structural Biology



Mays Cancer Center ranks nationally in clinical trial enrollments

Mays Cancer Center at The University of Texas Health Science Center at San Antonio has ranked fourth in the nation for clinical trial enrollments among more than 1,000 institutions that are members of the SWOG Cancer Research Network, formerly known as the Southwestern Oncology Group. SWOG is supported by the National Cancer Institute and the National Institutes of Health.



PhD candidate receives prestigious National Cancer Institute award

Behnam Ebrahimi, a PhD candidate in the Graduate School of Biomedical Sciences at The University of Texas Health Science Center at San Antonio, received a National Cancer Institute Predoctoral-to-Postdoctoral Fellow Transition (F99/K00) award, which supports outstanding PhD and other research doctoral candidates as they complete their dissertation research training (F99 phase) and transition to mentored, cancer-focused postdoctoral research positions (K00 phase).

With this funding, Ebrahimi is investigating mechanisms of the Leukemia Inhibitory Factor Receptor (LIFR), which is located on the surface of the cancer cells and serves as a conduit for Leukemia Inhibitory Factor (LIF) signaling that supports the growth of ovarian cancer. Using a novel LIFR inhibitor called EC359, Ebrahimi is investigating whether disruption of LIF/LIFR signaling will sensitize chemo-resistant cells and delay the development of chemotherapy resistance.



Two professors receive UT System Faculty STARs awards

Reuben S. Harris, PhD, professor and chair of the Department of Biochemistry and Structural Biology at The University of Texas Health Science Center at San Antonio, has received a \$1.5 million UT System Faculty Science and Technology Acquisition and Retention (STARs) award to establish his laboratory, assist fully with renovations and purchase new state-of-the-art equipment instrumental to developing new pre-clinical models for cancer drug development.

“Our lab focuses on mechanisms of tumor and virus evolution. Our primary focus is a family of DNA-mutating enzymes called APOBECs (apolipoprotein B mRNA editing enzyme, catalytic polypeptide). These enzymes normally protect us from virus infection but often become dysregulated in cancer and provide fuel for tumor evolution,” Harris said.



Elizabeth Wasmuth, PhD, assistant professor in the health science center’s Department of Biochemistry and Structural Biology, has received a STARs award of \$250,000 to support her cancer research studying the molecules responsible for prostate cancer progression.

Wasmuth said the award will be used to purchase game-changing laboratory equipment to accelerate research that may not have been possible otherwise.

“The UT System Rising STARs award will allow us to purchase three pieces of equipment, including two instruments that precisely measure masses and affinities of protein-protein interactions and proteins with their nucleic acid ligands to make important discoveries about the composition and behavior of a diverse array of biomolecules, as well as streamlining approaches for structural studies,” Wasmuth said. “The third piece of equipment will let us continuously monitor cancer cell growth in real time, allowing us to validate in cancer cells the functional importance of the contacts we identify using structural methods and the ability to uncover new therapeutic vulnerabilities.”



Health equity expert recognized for leadership excellence

Amelie Ramirez, DrPH, MPH, an internationally recognized health disparities researcher at The University of Texas Health Science Center at San Antonio, has won two prestigious awards in as many years.

Ramirez, professor and chair of the Department of Population Health Sciences and director of the health science center's Institute for Health Promotion Research, received the 2023 Association of American Cancer Institutes (AACI) Cancer Health Equity Award and was named a "Cycle Breaker" by TV personality Oprah Winfrey.

The AACI award recognizes exceptional leadership in promoting health equity, mitigating cancer disparities and advocating for diversity and inclusion.

"I am honored to receive the AACI Cancer Health Equity Award. It recognizes the hard work we do at the Mays Cancer Center

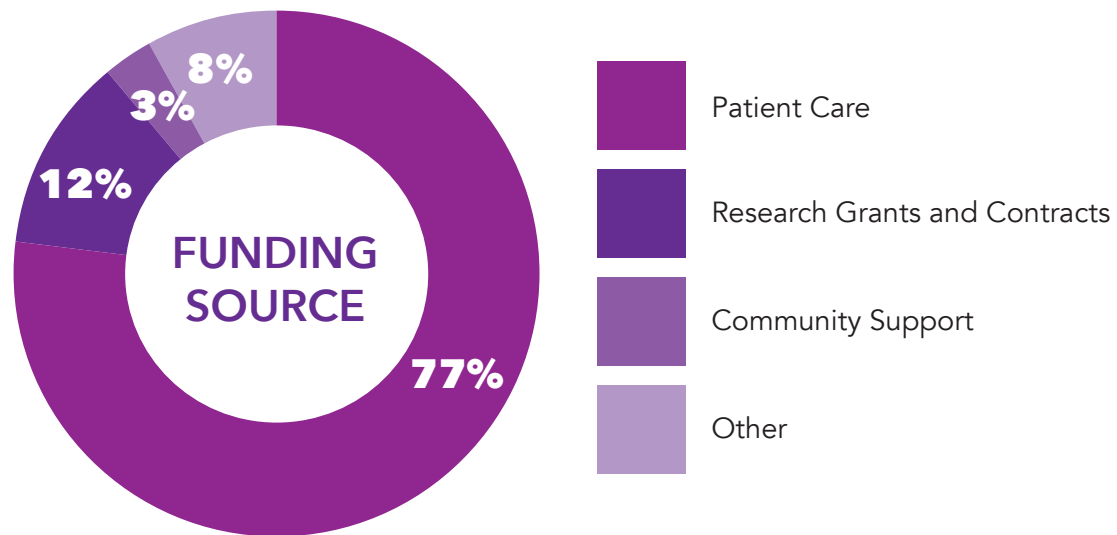
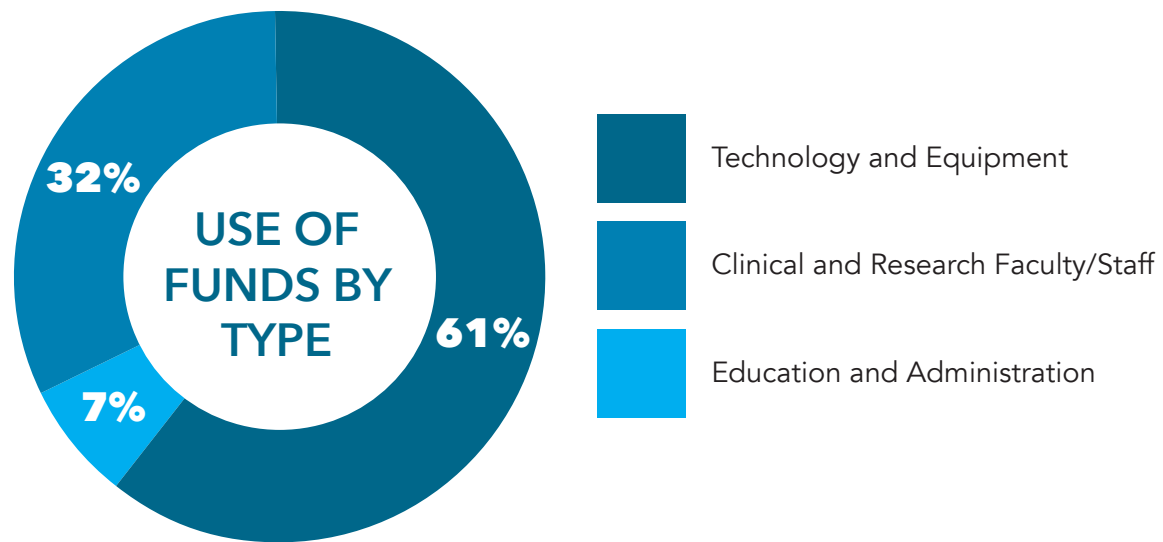
to promote health equity, study new approaches to reduce health disparities and improve cancer care for the people in our community," said Ramirez, who also serves as associate director of the Community Outreach and Engagement Program at the cancer center.

The "Cycle Breaker" recognition, featured in a video released in October 2022 by the Smithsonian Channel, highlights Ramirez's work to break the cycles of inequities that often worsen health for Hispanics.

Ramirez has garnered her expertise across more than 30 years of developing research and communication models to improve the health of Hispanics locally and nationally. She currently directs Salud America!, a health equity program that empowers its vast network of over 500,000 community and school leaders to drive healthy policy and system changes to promote health equity and support for Hispanic families.

"Our mission is to inspire people to drive community change for health equity for Latino and all families," Ramirez said. 🇺🇸





92,864 TOTAL PATIENT ENCOUNTERS

4,953 NEWLY DIAGNOSED PATIENTS

2,281 CANCER SURGERIES

\$139 million ECONOMIC IMPACT

268 ACTIVE RESEARCH PROJECTS
168 peer-reviewed grants and 100 non-peer-reviewed grants and contracts

175+ CLINICAL STUDIES
Prevention, treatment and survivorship clinical studies, including 39 new clinical research studies opened in FY23

IN FY23, MAYS CANCER CENTER WITNESSED A

15%

GROWTH IN GRANT FUNDING FROM THE NATIONAL CANCER INSTITUTE

SENIOR LEADERSHIP

- Patrick Sung, DPhil**
Interim Director, Mays Cancer Center
Director, Greehey Children’s Cancer
Research Institute
- Mark Bonnen, MD**
Chief Medical Officer
- Tim H.M. Huang, PhD**
Deputy Director
- Travis Corwin, MBA**
Interim Director, Finance
and Administration
- David Guis, MD, PhD**
Associate Director,
Translational Research
- Anand Karnad, MD**
Acting Chief, Division of
Hematology and Oncology
- Robin Leach, PhD**
Associate Director, Education
- Daruka Mahadevan, MD, PhD**
Associate Director,
Clinical Research
- Susan Padalecki, PhD**
Associate Director, Research
Administration

- Alexander Parikh, MD, MPH, FACS, FSSO**
Chief, Division of Surgical
Oncology and Endocrine Surgery
- Amelie Ramirez, DrPH**
Associate Director, Community
Outreach and Engagement
- Luzhe Sun, PhD**
Associate Director, Basic Research
- Gwen Tate, MBA, MSN, RN, NEA-BC**
Chief Nursing Officer
- Daohong Zhou, MD**
Associate Director, Drug Development

SCIENTIFIC PROGRAM LEADERS

- Andrew Brenner, MD, PhD**
Co-leader, Experimental and
Developmental Therapeutics
- Sandeep Burma, PhD**
Interim Co-leader, Cancer
Development and Progression
- Patricia Dahia, MD, PhD**
Co-leader, Cancer Development
and Progression

- Pratap Kumar, PhD**
Co-leader, Population Science
and Prevention
- Manjeet Rao, PhD**
Co-leader, Experimental and
Developmental Therapeutics
- Gail Tomlinson, MD, PhD**
Co-leader, Population Science
and Prevention
- Ratna Vadlamudi, PhD**
Co-leader, Cancer Development
and Progression

CLINICAL AND RESEARCH OPERATIONS

- Josh Asper, PA-C**
Vice Chair, Clinical Operations,
Radiation Oncology
- Sonia Lisa Creighton, MBA**
Director, Clinical Trials Office
- Angela Crowder, RN, BSN**
Director, Practice Operations, Infusion
- Lydia Herrera, PharmD, MBA, BCPPS**
Director, Pharmacy Operations

- Daruka Mahadevan, MD, PhD**
Director, Institute for Drug Development
- Roseanna Martinez, MPH**
Director, Practice Operations,
Patient Access
- Melissa Nashawati, MPA**
Director, Quality Assurance
and Training
- Jeanie Paradise, MA, LPC-S**
Director, Clinical Operations,
Social Services
- Mary Salazar, MSN, APRN-BC**
Director, Oncology Nurse Navigation
- Cynthia Smith**
Director, Financial Operations
- Lixin Song, PhD, RN, FAAN**
Director, Caregiver Research
- Elizabeth Thompson, MLS**
Director, Laboratory Operations

SHARED RESOURCES

BIostatistics and Bioinformatics

Yidong Chen, PhD
Co-director

Jonathan Gelfond, MD, PhD
Co-director

Drug Discovery and Structural Biology

Sean Olsen, PhD
Co-director, Structural Biology

Daohong Zhou, MD
Co-director, Drug Discovery

Flow Cytometry

Michael Berton, PhD
Scientific Director

Nameer Kirma, PhD
Technical Director

Yue Li, PhD
Director

Mass Spectrometry

Susan Weintraub, PhD
Director

Next-Generation Sequencing

Zhao Lai, PhD
Director

Optical Imaging

James Lechleiter, PhD
Director

Exing Wang, PhD
Co-director

Multidisciplinary Program Leaders

Sukeshi Arora, MD
Gastrointestinal Oncology

Andrew Brenner, MD, PhD
Neuro-oncology

Matthew Butler, MD
Hematology Oncology

Ramon Cancino, MD, MBA, MS, FAAFP
Oncology Primary Care

Virginia Kaklamani, MD, DSc
Breast Oncology

Anand Karnad, MD
Classical Hematology and Blood Disorders

Debra Kent, DNP
Oncology Survivorship

Michael Liss, MD, PhD
Medical Director, Clinical Trials Office

Daruka Mahadevan, MD, PhD
Phase I Oncology

Georgia McCann, MD
Gynecologic Oncology

Prince Otchere, MD
Cardio-oncology

Montaser Shaheen, MD
Immunotherapy Program

Robert Svatek, MD
Urologic Oncology

Gail Tomlinson, MD, PhD
Pediatric Hematology Oncology

Department Chairs/ Division Chiefs

Mark Bonnen, MD
Professor and Chair, Radiation Oncology

John H. Calhoon, MD
Professor and Chair, Cardiothoracic Surgery

Francisco G. Cigarroa, MD
Director, Transplant Center
Professor, Surgery

Daniel DeArmond, MD
Chief, Thoracic Surgery

John Floyd, II, MD
Professor and Chair, Neurosurgery

Anton Fries, MD, PhD
Chief, Plastic and
Reconstructive Surgery

Anand Karnad, MD
Acting Chief, Division of Hematology
and Oncology

Marsha Kinney, MD
Chair, Department of Pathology
and Laboratory Medicine

Georgia McCann, MD
Chief, Gynecologic Oncology

Frank Miller, MD, FACS
Professor and Chair, Otolaryngology

Sandra S. Osswald, MD
Professor and Chief, Dermatology and
Cutaneous Surgery

Alexander Parikh, MD, MPH, FACS, FSSO
Professor and Chief, Surgical Oncology

Robert H. Quinn, MD
Professor and Chair, Orthopaedics

W. Brian Reeves, MD
Professor and Chair, Medicine

Randal D. Robinson, MD
Professor and Chair, Obstetrics
and Gynecology

Ronald Stewart, MD
Professor and Chair, Surgery

Rajeev Suri, MD, MBA, FACR, FSIR
Professor and Chair, Radiology

Robert Svatek, MD
Professor and Interim Chair, Urology

Gail Tomlinson, MD, PhD
Professor and Chief, Pediatric
Hematology Oncology

MAYS CANCER CENTER NEW MEMBERS

The Mays Cancer Center is an Organized Research Unit of The University of Texas Health Science Center at San Antonio. As a National Cancer Institute-designated Cancer Center, Mays Cancer Center has a formal membership policy in support of the center’s mission to promote interdisciplinary research in cancer-related areas of basic science, clinical research and cancer prevention and control, and to foster the application of the results of that research in the community setting, especially in the South Texas community served by the center. Mays Cancer Center members include those who serve as a principal investigator on a National Institutes of Health research project grant or other equivalent peer-reviewed, cancer-related grant or who are a principal or co-investigator of cancer center clinical trials.

NEW MAYS CANCER CENTER MEMBERS

Colin Court, MD, PhD
Assistant Professor, Department of Surgery
Division of Surgical Oncology and Endocrine Surgery
Research interests: gastrointestinal cancers, cancer genetics

Shraddha Dalwadi, MD, MBA
Assistant Professor, Department of Radiation Oncology
Research interests: new therapeutic modalities for breast cancer

Jennifer Huberty, PhD
Professor, Department of Medicine
Division of Hematology and Oncology
Research interests: meditation and yoga as interventions for cancer patients and caregivers

Hyoung-gon Lee, PhD
Associate Professor, Department of Biology
The University of Texas at San Antonio
Research interests: peripheral neuropathy

Jihoon Lee, PhD
Assistant Professor, Department of Molecular Medicine
Research interests: roles of epigenetic and epitranscriptomic alterations in cancer development

Justin Leung, PhD
Associate Professor, Department of Radiation Oncology
Research interests: DNA repair mechanisms

Angelina Vaseva, PhD
Assistant Professor, Department of Molecular Medicine
Research interests: novel therapeutic targets in pediatric sarcomas

Suryavathi Viswanadhapalli, PhD
Assistant Professor, Department of Obstetrics and Gynecology
Research interests: new therapeutic targets in women’s cancers

Lu Wang, PhD
Assistant Professor, Department of Biochemistry
and Structural Biology
Research interests: age-associated epigenetic alterations in the development of cancer

MAYS CANCER CENTER

ANNUAL REPORT 2023

ACTING PRESIDENT

UT Health San Antonio
Robert Hromas, MD, FACP

INTERIM DIRECTOR

Patrick Sung, DPhil

CHIEF MEDICAL OFFICER

Mark Bonnen, MD

DEPUTY DIRECTOR

Tim H.M. Huang, PhD

ASSOCIATE DIRECTORS

David Guis, MD, PhD
Robin Leach, PhD
Daruka Mahadevan, MD, PhD
Susan Padalecki, PhD
Alexander Parikh, MD, MPH, FACS, FSSO
Amelie Ramirez, DrPH
Luzhe Sun, PhD
Gwen Tate, MBA, MSN, RN, NEA-BC
Daohong Zhou, MD

DIRECTOR OF MARKETING

Lauren Smith

DIRECTOR OF COMMUNICATIONS

Lety Laurel Matos

DIRECTOR OF CREATIVE AND BRAND SERVICES

Jennifer Bittle

PUBLICATIONS MANAGER

Karla Hignite

EDITOR

Norma Rabago

CONTRIBUTORS

Jane Alvarez-Hernandez, Leanne Arispe, Cliff Despres,
Steven Lee, Will Sansom, Eileen Teves, Jess Washburn

CONTRIBUTING COPY EDITORS

Orith Farago, Kate Hunger, Jessica Binkley Lain, Kristen Zapata

DESIGN AND PRODUCTION

Creative and Brand Services
Edward Tamez, manager, Brand and Creative Design
David Constante, senior photographer

Mays Cancer Center Annual Report is published by
Marketing, Communications and Media.

© The University of Texas Health Science Center at San Antonio,
2024. All rights reserved.

cancer.uthscsa.edu



A Cancer Center Designated by the
National Cancer Institute

210-450-1000

cancer.uthscsa.edu



UT Health
San Antonio

Mays Cancer Center