

# TRIBUTE



Empowering  
African American  
faith communities  
with dementia  
outreach

## A NURSE'S MISSION





## DEAN'S MESSAGE

# The need for nursing research

**N**urse researchers are scientists who study a phenomenon to develop new knowledge for the profession. The University of Texas Health Science Center at San Antonio School of Nursing is fortunate to have many esteemed research faculty devoted to improving patient outcomes through their specific investigation of nursing practice, education and administration.

Because research is so critical to nursing practice, our undergraduate and graduate students take courses in research and statistics. They participate in studies designed to answer patient care questions. Only with exposure and experience can students begin to understand the concepts and importance of nursing research.

One opportunity our students have to participate is through the Summer Undergraduate Nursing Research ImmerSion Experience. The SUNRISE program supports students for an eight-week period during which they engage in faculty-mentored research. This initiative is funded through our Office of Student Success by a U.S. Department of Education grant.

The School of Nursing's Office of Nursing Research is led by Lixin Song, PhD, RN, FAAN. She has many years of National Institutes of Health-funded research in the field of oncology. As the vice dean of research, she advises faculty on grant submissions.

The Office of Nursing Research likewise has numerous resources to support faculty directly, such as mock review of grants prior to submission. Research faculty also mentor PhD students on their dissertation work, preparing them for positions as nurse scientists in schools of nursing and in magnet-designated facilities.

This edition of *Tribute* highlights some of the unique and exciting programs of research of our School of Nursing faculty. I hope you enjoy learning more about their important work and will consider donating to the Nursing Research Fund to support new faculty embarking on their pilot research. For assistance, contact Anna Chowdhury at [chowdhurya@uthscsa.edu](mailto:chowdhurya@uthscsa.edu).

*Sonya R. Hardin*

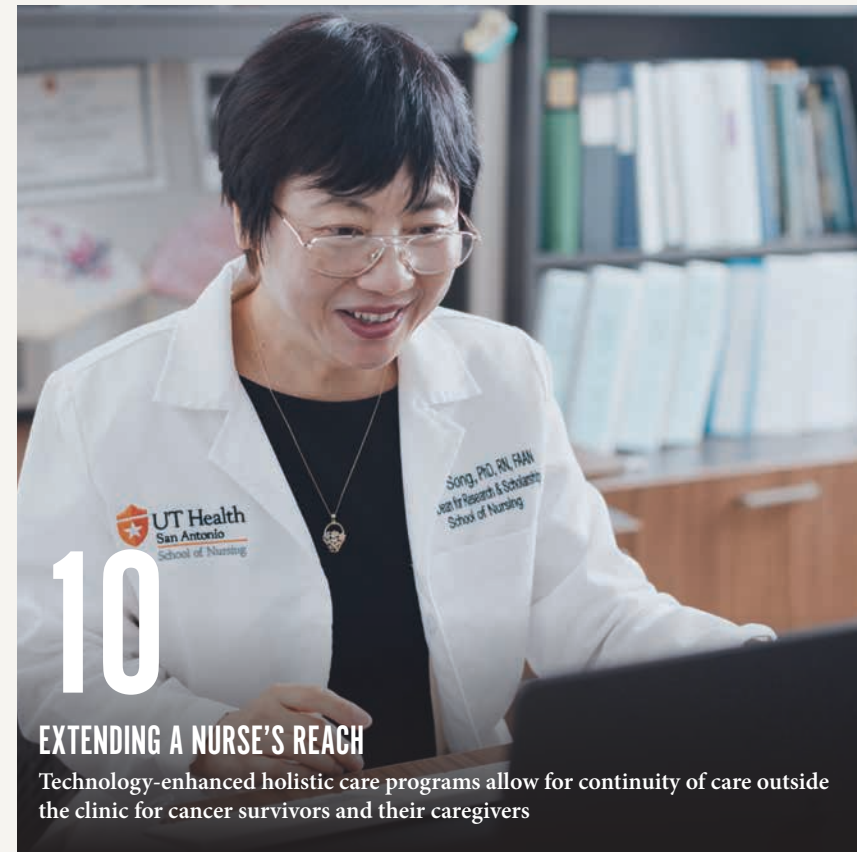
Sonya Renae Hardin, PhD, MBA/MHA, APRN, FAAN  
Dean, School of Nursing



### TRIBUTE ONLINE

See the online version of *Tribute* for additional stories about UT Health San Antonio School of Nursing programming and our faculty and alumni at [magazines.uthscsa.edu/schools/tribute](http://magazines.uthscsa.edu/schools/tribute).

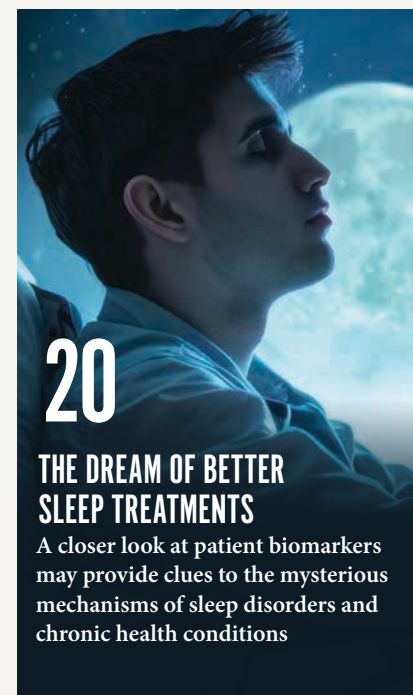
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## ON THE COVER

Fayron Epps, PhD, RN, FGSA, FAAN, joined the School of Nursing this January to enhance the quality of life for families affected by dementia. Her expertise lies in developing evidence-based practices specifically for African Americans with dementia and their caregivers. See page 14 to learn how Epps is exploring the ways in which religious activities and spiritual connectedness can create meaningful engagement among people with, and those impacted by, dementia.





## Region's first nurse anesthetist program has launched

UT Health San Antonio's School of Nursing has launched a Bachelor of Science in Nursing to Doctor of Nursing Practice-Nurse Anesthesia program to address the rising demand for anesthesia services. Led by Director Alison R. Peterson, DNP, CRNA, the program — which welcomes its first students this fall — will prepare highly skilled certified registered nurse anesthetists to meet diverse medical needs, particularly in underserved areas.

Job opportunities for CRNAs are expected to grow throughout the U.S., where nurse anesthetist employment is projected to increase by 17% from 2018 to 2028.

The three-year, full-time program emphasizes nursing science, ethics and evidence-based practice. Applicants must hold a BSN degree, possess a current license as a registered nurse in Texas or a compact license with multistate privileges that includes Texas, have at least one year of critical care RN experience and other academic and certification qualifications.

Upon completion, graduates will be equipped to provide anesthesia care and enhance patient outcomes. For more information and application details, scan the QR code.



## Center for Simulation Innovation receives accreditation

The school's Center for Simulation Innovation has earned national recognition for its interactive courses and training programs. Recently accredited by the Society for Simulation in Healthcare, the center has grown significantly since its inception in 2013, now boasting over 20 advanced training stations equipped with medical manikins and virtual reality technology.

## Best BSN program in South Texas, nationally ranked DNP program

UT Health San Antonio's School of Nursing maintains its top 5% national ranking, tied at No. 31 in the *U.S. News & World Report's* 2023–2024 Best Colleges rankings. This position solidifies its status as the leading nursing program in South Texas.

In the publication's 2024 Best Nursing Schools list, the School of Nursing's Doctor of Nursing Practice program is ranked No. 54 out of 157 qualifying schools.

The school offers five academic programs, emphasizing equity and fostering excellence in nursing. Notably, one-third of its enrollment is comprised of first-generation college students. The program stands out for its innovative teaching, quality research, compassionate care and community service. The ranking is based on peer-assessment surveys, with schools evaluated on the overall quality of their undergraduate and graduate nursing programs.

# School of Nursing faculty and staff recognized for their service and excellence

### 2023 Top 2% of Scientists Scopus



Jacqueline McGrath, PhD, RN, FNAP, FAAN, vice dean of faculty excellence, was recognized among the top 2% of scientists worldwide based on Scopus citation metrics. Esteemed for her research contributions advancing neonatal health care, McGrath has demonstrated exceptional leadership and scholarly excellence and continues to shape the future of nursing through mentorship and funded collaborations.

### American Academy of Nursing, National League for Nursing's Academy of Nursing Education and Palliative Care Nursing Fellow



Megan P. Lippe, PhD, RN, ANEF, FPCN, FAAN, associate professor, was granted fellowship into three esteemed organizations: the American Academy of Nursing, National League for Nursing's Academy of Nursing Education and Palliative Care Nursing. Lippe's multifaceted expertise and dedication to advancing nursing education and palliative care have garnered distinction within the profession throughout 2023 and into 2024.

### Leaders and Legends of Nursing Texas Nurses Association



Kathleen R. Stevens, EdD, RN, ANEF, FAAN, professor, was named among the 2024 Leaders and Legends of Nursing honorees by the Texas Nurses Association, recognizing exemplary leadership and contributions to the nursing profession. Stevens' volunteer service to the association was recognized for significantly contributing to the association and health transformation locally, statewide and nationally.

### San Antonio Women's Hall of Fame



Norma Martinez Rogers, PhD, RN, FAAN, professor emeritus, was a San Antonio Women's Hall of Fame 2024 inductee in the health professions category. The honor celebrates outstanding women who have contributed substantially to San Antonio or Bexar County and have demonstrated their support of other women.

### Service Member Patriot Award Employer Support of the Guard and Reserve



Mark Soucy, PhD, RN, PMHNP, FAANP, associate professor/clinical, was honored with the Employer Support of the Guard and Reserve's Service Member Patriot Award for exemplary support of military personnel. Soucy was recognized for his dedication to accommodating a Doctor of Nursing Practice student's reservist duty while maintaining excellence in teaching and mentorship.

### Presidential Award for Staff Individual Excellence UT Health San Antonio

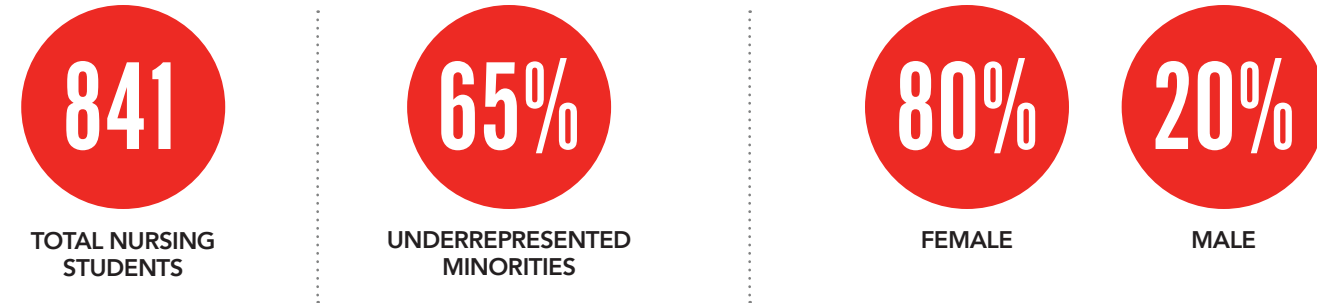


Angela M. Watts, PhD, director for student success, received a 2024 Presidential Award for Staff Individual Excellence. The award is given to recognize staff members who have made noteworthy and distinctive contributions to the health science center by serving its missions of education, research, patient care and community engagement and demonstrating agility, collaboration and innovation.

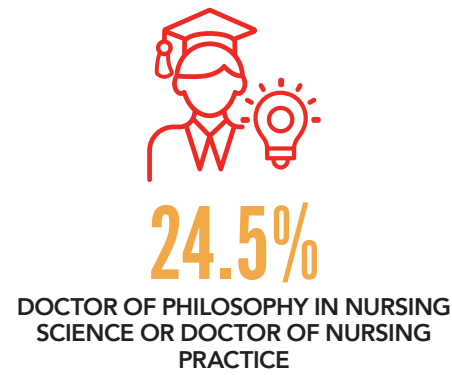
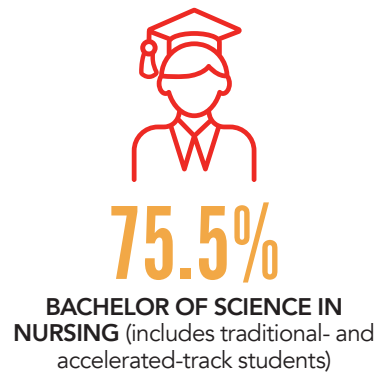
# DEAN'S REPORT

## EDUCATION: 2023-2024 ACADEMIC YEAR

### STUDENT DEMOGRAPHICS



### ENROLLMENT

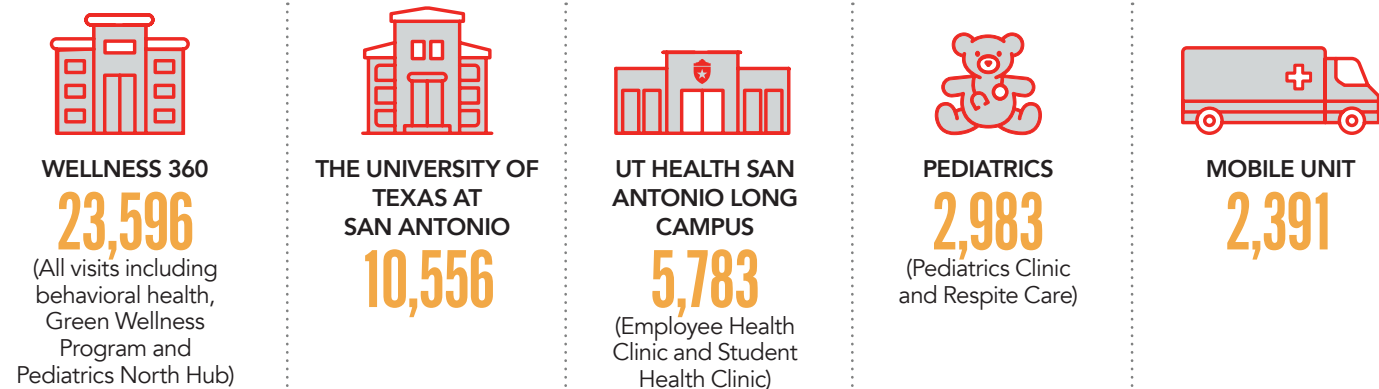


### FIRST-TIME PASS RATE \*

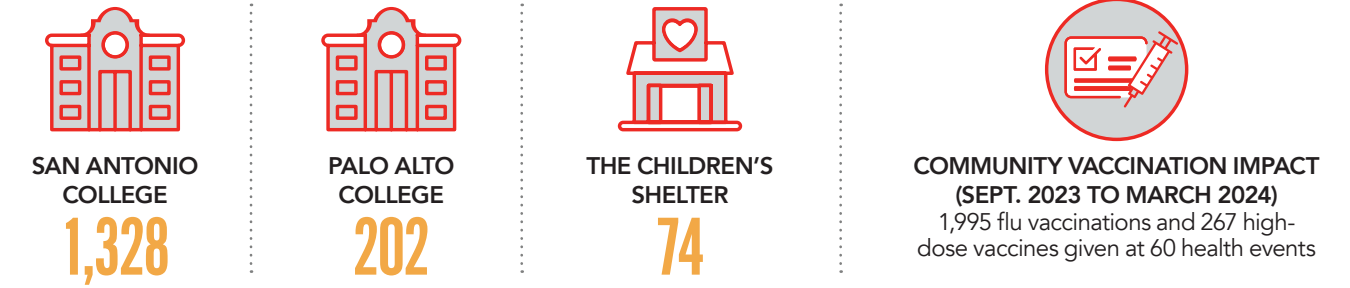


## PATIENT CARE

### TOTAL APPOINTMENTS (FY24: SEPT. 2023 TO APRIL 2024)



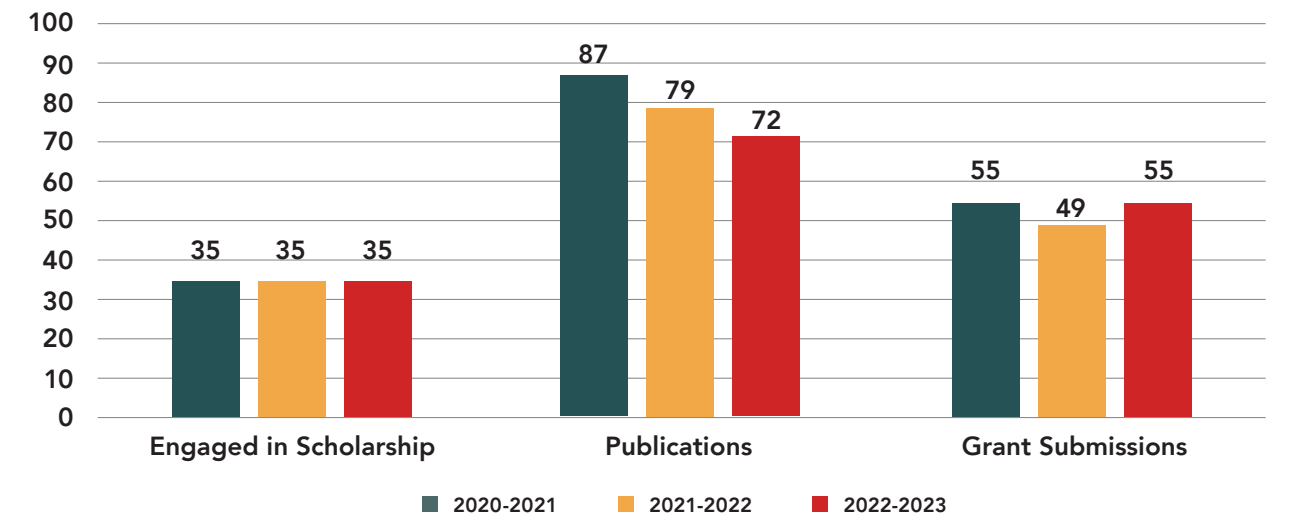
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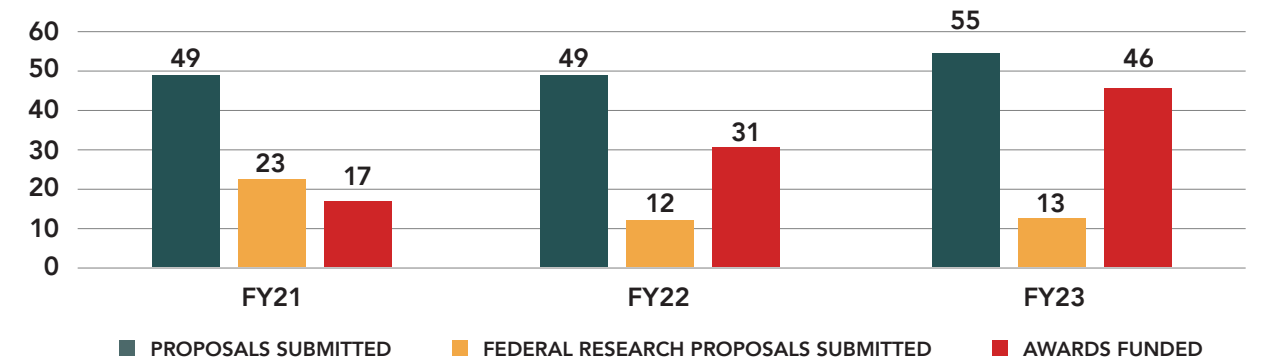
## RESEARCH



### FACULTY SCHOLARSHIP BENCHMARKS FY21-23



### SPONSORED PROJECTS (EXTERNAL) FY21-23



## DEVELOPMENT (FY23)



**\$1,374,126**

TOTAL PHILANTHROPY



**150**

NUMBER OF ALL DONORS



**\$897,894**

TOTAL SCHOLARSHIPS  
(current and endowed)

## FY23 SCHOLARSHIP AWARDS

SEMESTER	APPLICATIONS	AWARDS	AMOUNT AWARDED
FALL 2022	295	145	\$471,891
SPRING 2023	356	87	\$186,510
SUMMER 2023	200	36	\$90,581
<b>TOTAL</b>	<b>851</b>	<b>268</b>	<b>\$748,981</b>

## NOTABLE GIFTS



**\$500,000**

to establish The International Bancshares Corporation Foundation Endowed Professorship in Nursing Administration and Informatics at the UT Health San Antonio School of Nursing



**\$318,856**

to the Jean Migliorino Piccione Endowed Scholarship from Col. Jean Piccione



**\$100,000**

to the Patricia E. Miller Reed, Lois Ann Miller Cole, Jane June Miller, Warren "Butch" Miller, and Wanda E. Reed Endowed Nursing Scholarship from Mr. Ronald Reed

## RESEARCHER AND SCHOLAR SPOTLIGHTS

The School of Nursing is shaping the future of nursing education and patient care through a wide and varying range of research and scholarship programming



**ADELITA G. CANTU, PHD ('06), RN, FAAN**, associate professor, specializes in public and community health nursing. Her program of teaching, service and research is dedicated to promoting healthy communities by strengthening public and community health initiatives. Cantu's work is rooted in the socioecological model, serving as a framework to prevent disease and enhance health and well-being across primary, secondary and tertiary levels of prevention.



**ALLISON D. CRAWFORD, PHD ('21), RN**, assistant professor, examines health disparities in childbearing communities influenced by incarceration. Through her research, she developed JUN, a mobile health application, which aims to enhance self-efficacy in underserved childbearing women. Long term, Crawford will further utilize her post-doctoral training in digital health to develop, tailor and test similar interventions that use technology to enhance access to care discreetly and affordably for populations with high risk factors.



**BERTHA E. FLORES, PHD, PHD, RN, WHNP-BC**, associate professor, contributes to the field of health disparities by underscoring the importance of cultural literacy and the use of code switching in health communication. She is currently participating in a multicomponent intervention aimed at expanding hepatitis C virus screening and efforts to increase the use of human papillomavirus vaccines among medically underserved young adults in Texas.



**MEGAN P. LIPPE, PHD, RN, ANEF, FPCN, FAAN**, associate professor, advances palliative care competence, evidenced by her leadership as an End-of-Life Nursing Education Consortium co-investigator. Her revision of national competence statements for undergraduate and graduate education (CARES and G-CARES, respectively) is endorsed by the American Association of Colleges of Nursing. She has also developed quantitative measures to assess primary palliative care curriculum and competence among nursing students and entry-to-practice nurses, alongside pioneering high-fidelity palliative care simulations.



**KELLY MCGLOTHEN-BELL, PHD ('17), RN, IBCLC**, assistant professor, focuses on community-informed health outcomes research, emphasizing projects on maternal-child health. She aims to address gaps in reproductive rights and child welfare laws impacting families in Texas. Through existing partnerships, she supports policies and strategies improving maternal-child health at state and national levels. She also investigates how discrimination and stigma affect access to obstetrical care and treatment services among pregnant and parenting people with substance use disorder, intending to develop stigma-reduction interventions to reduce disparities.



**NORMA MARTINEZ ROGERS, PHD, MSN ('78), RN, FAAN**, professor emeritus, recruits and engages baccalaureate nursing students in community-based primary care for underserved populations. As part of her role in the Office of Nursing Research, Rogers guides faculty pursuing scholarship endeavors and grant funding. She also chairs the board of Ride Connect Texas, a nonprofit that provides transportation for the elderly to access health care, demonstrating her continued dedication to nursing and advocacy for the underserved.



**KAREN SCHWAB, PHD, MSN ('01), APRN, CPNP-PC, PMHS**, associate professor/clinical, concentrates on the specific health care needs of children receiving foster care services. She is working to expand foster care health services across Texas' Public Health Region 8, which is composed of 28 counties in Central Texas and the Hill Country that extend from Del Rio to Victoria. Schwab's efforts help ensure youth in foster care begin receiving consistent medical care.



**BIANCA SHIEU, PHD, RN**, assistant professor, investigates initiatives aimed at enhancing the quality of life and care for younger nursing home residents as well as improving the overall quality of care within the long-term care system. Her current research focuses on the use of non-pharmaceutical interventions, specifically auricular point acupuncture, to address chronic pain management in individuals affected by dementia. Shieu is a 2024 National Institute on Aging Butler-Williams Scholar.



# EXTENDING A *nurse's* *reach*

## Technology-enhanced holistic care programs allow for continuity of care outside the clinic for cancer survivors and their caregivers

By Norma Rabago

Two significant events in Lixin (Lee) Song's life influenced her research in cancer survivorship. Both were equally personal. Song, PhD, RN, FAAN, is vice dean of research and scholarship at UT Health San Antonio's School of Nursing. Before pursuing her doctoral degree, Song's work in obstetrics and gynecology medicine centered on "the happy, beginning part of life," as she describes it. That led her to work with a University of Michigan community program helping uninsured and economically disadvantaged women receive free screenings for breast and cervical cancer.

"The Healthy Asian Americans Project was my first job in this country," said Song, a Chinese national. "We would drive women to the clinic, serve as a translator and help

them get a free screening to ensure they were healthy."

She said the program was successful and attracted statewide attention. However, she noticed something about the women diagnosed with cancer.

"Even though it was a wonderful program, I realized the challenges women faced after the diagnosis. They would get the free screening, but with this population of women, they didn't have insurance, didn't speak English or drive," she said. "Once they got the diagnosis, they were so scared. People needed more support after the diagnosis."

Another motivation for Song's interest in cancer survivorship: witnessing the devastating impact of lung cancer on a close friend.

"She was healthy and then suddenly diagnosed with end-

stage lung cancer. She had some miserable complications after the diagnosis," Song said. "I realized there are

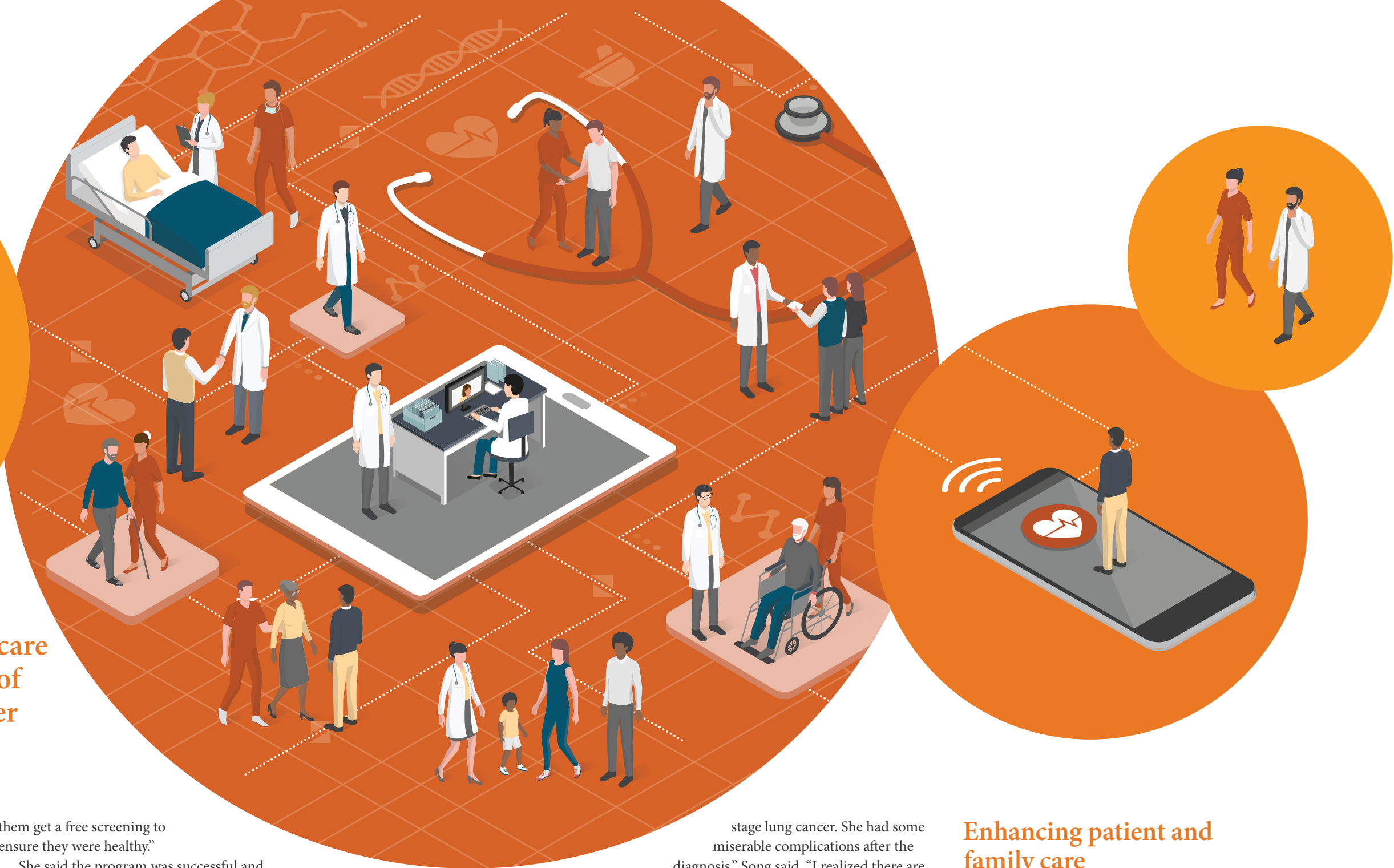
huge issues with family-provider communications and symptom management, how to talk to families about the impact of a cancer diagnosis and treatment and reducing the impacts of cancer symptoms."

These experiences inspired Song to shift her focus to pursue doctoral training in cancer survivorship and supportive care. Drawing on her expertise in women's health, Song's research now centers on enhancing the health outcomes of cancer patients and their family caregivers by developing innovative, technology-enhanced holistic care programs that prioritize the well-being of both patients and their families.

## Enhancing patient and family care

In a report from the American Cancer Society, close to 17 million Americans with a history of cancer had survived it in 2019. By 2030, that number will rise to 22.1 million. Yet, as the survivor count increases, the number of home health aides and physicians is decreasing, according to Song. The Association of American Medical Colleges predicts that, by 2036, there will be a shortage of up to 86,000 physicians in the U.S., which will leave the responsibility of cancer patients' home care largely to their family members, Song said.

Employing a variety of technological tools, including fitness trackers and audio and radiofrequency sensing,



Song aims to bridge the gap between hospital care and community-based support. Her goal is to “extend nurses’ helping hands” beyond clinical settings, enabling them to deliver patient and family-centered care that effectively addresses their needs during self-management and family care.

While Song’s postdoctoral training expanded the focus on supportive care for patients and caregivers managing many types of cancer, she began her research as a doctoral student with prostate cancer patients.

The standard of care for localized prostate cancer patients is active surveillance, prostatectomy and radiation therapy — with or without testosterone deprivation — all of which brings its own set of challenges. These include hot flashes, urinary incontinence and, for some patients, sexual dysfunction — effects patients were reluctant to discuss.

## Improving health literacy

To help patients and spousal caregivers navigate these challenges, Song launched the Prostate Cancer Education



*The amount of information a newly diagnosed patient has to deal with, from treatment options to the uncertain benefit of survival, can overwhelm a patient.*

— Lixin Song, PhD, RN, FAAN

and Resources for Couples (PERC) study, which served as a couple-centered symptom management program. Couples used online education and additional resources to learn how to manage the patient’s symptoms at their own pace.

Song expanded this effort to demonstrate the potential advantages of integrating e-health programs such as PERC into the electronic medical record, benefiting a wider range of patients and their families during this challenging phase.

She then initiated the Prostate Cancer Information, Communication and Support Program study. This was designed to provide accessible information on prostate cancer, treatment options and transition to home care, catering to individuals of all health-literacy levels and educational backgrounds.

“The amount of information a newly diagnosed patient has to deal with, from treatment options to the uncertain benefit of survival, can overwhelm a patient,” Song said.

Using credible sources of information, such as Medline Plus, and natural language-processing technology, Song used various text and video recordings to help those with different learning styles consume information derived from clinical guidelines and research evidence.

“We used recordings to help patients and their families remember their discussions with health professionals about treatment options and related information. Natural language processing was then used to generate hyperlinks for terminology that patients didn’t understand so they could learn more,” she said.

## Achieving balance

Since joining the School of Nursing in 2022, Song has continued her research with cancer patients. She is actively adapting her intervention programs to better serve the local cancer population and their families, who are predominantly Hispanic.

The Center for Holistic Care of Cancer Patients and Families is currently under renovation within the school as a space to leverage this ongoing research. Discussing her vision for the project, Song expresses her desire to assist caregivers in achieving a better balance between their own needs and those of their loved ones, emphasizing the importance of developing a program that seamlessly integrates with routine clinical care.

Reflecting on a poignant encounter during a previous study interview, Song recounted the experience of a participant discussing her husband’s surgery and subsequent doctor visits.

“[The wife] ended up having emergency surgery, and then she discharged herself to make sure she was available for her husband,” she said. “I was shocked, but not surprised. This is why we have to treat cancer survivorship as a family issue rather than an individual issue.” ■



# TECHNOLOGY-ASSISTED CANCER CARE

Lixin (Lee) Song, PhD, RN, FAAN, is taking a lead role in developing technology-driven supportive care initiatives designed to assist cancer patients undergoing ostomy creation for bladder, colorectal and gynecological cancers in transitioning from hospital-based care to self-management at home. As vice dean of research and scholarship at UT Health San Antonio’s School of Nursing, Song and her team aim to enhance the continuity of care through telehealth modalities such as telemonitoring and telesensors.

To this end, Song developed and pilot-tested the Patient-Reported, Outcomes-Informed Symptom Management System (PRISMS) in both English and Spanish. She is now spearheading the National Library of Medicine-funded AUR/AURA-ALZ studies. The studies involve the development and testing of an innovative system known as AUR + RADIO (AURA), which integrates audio-based voice assistant devices with radiofrequency-sensing technology. This system caters to cancer patients who have recently undergone major surgeries such as ostomy creation but retain cognitive capabilities. The AURA-ALZ study focuses on patients with Alzheimer’s disease who may be physically able but are experiencing cognitive decline.

The AURA and AURA-ALZ systems address challenges related to communication, particularly the differences in speech patterns between cognitively healthy patients and those experiencing cognitive decline. It is expected that these tools will help ensure that individuals receive personalized support tailored to their unique needs.



**READ THE RESEARCH**

Scan the QR code to access the study to learn more.





# A NURSE'S MISSION

Empowering African American faith  
communities with dementia outreach

*By Kristen Zapata*





Together, best friends Tasha Wilson and Shanna Magee navigated the challenges of caring for their mothers, who both faced a dementia diagnosis.

**Left to right:** Tasha Wilson, Fayretta Braggs, Mildred Magee and Shanna Magee.

**Photo credit:** Lona Jones Photography

“African Americans are twice as likely to develop dementia than non-Hispanic white Americans — that’s a higher risk than any other racial group,” said Fayron Epps, PhD, RN, FGSA, FAAN, a community-engaged research nurse and professor at The University of Texas Health Science Center at San Antonio School of Nursing. “The Black community doesn’t even realize the extent of how dementia disproportionately affects them. They often adopt a common belief that short-term memory loss, slight confusion and a little agitation is a normal part of aging, not a sign of a more serious condition.”

Epps, who joined the university in January 2024 as the inaugural Karen and Ronald Herrmann Distinguished Chair in Caregiver Research, said she largely works within the African American community because

it is the most-affected population for dementia, yet it is often underrepresented in related research.

In response, Epps has rooted herself within national and grassroots organizations, government agencies and faith communities to create tangible resources where people are searching for them. For many, this includes places of worship. And in the face of adversity, African American churches have historically served communities as places of hope, prayer and solidarity as well as a social hub for reliable guidance and information.

“Faith communities are an integral part of the health care team,” said Epps. “Even if we don’t attend every Sunday, we lean on the church for resources and answers. Right now, many churches don’t have the answers and are unaware of what dementia is. We are leading a movement and equipping places of worship with the resources needed to better support their parishioners facing dementia.”

## REACHING THE MOST AFFECTED

Based on feedback Epps received firsthand from caregivers and people living with dementia, she founded Alter, a program to train faith leaders and caregivers about the condition and provide ongoing support through a network of certified “dementia-friendly and inclusive faith” partners. The program offers stipends to Alter partners for the sustainability of dementia-support services. Services include guest speaker events, memory and hearing screenings, health education materials, audio and visual media, research-awareness kits and community information.

“I always say that you can’t beat a best practice,” said the Rev. Jeff Carr, leader of an Alter partner church in Nashville, Tennessee. For the past two years, Carr and



**Fayron Epps, PhD, RN, FGSA, FAAN,** was named as the School of Nursing’s inaugural Karen and Ronald Herrmann Distinguished Chair in Caregiver Research this January.

what he calls his mini-Alter team have been working to make their congregation dementia-friendly.

“We put on performances for our elders and play games with them. This year, we established a new memory café program, which came directly from Alter,” he said. “They are a safe way for our elders to gather socially with their care partners and build support networks. We are expanding these to occur quarterly.”

The congregation has also implemented shortened six-minute church services.

“It’s amazing because it’s geared toward people who may not have long attention spans or who, because of dementia or mild cognitazant impairment, may not be able to focus, but they still want to get some spiritual food,” Carr said.

Carr’s team also partners with a local nursing home that allows the delivery of gifts and information to residents and their families.

Faith leaders use their position within the community to address the stigma of dementia and provide evidence-based information that can elevate a family’s quality of life, Epps said. Currently, 85 churches in 14 states participate in Alter, but she plans for expansion in every state.

“Nurse-led community engagement is a great chance for health systems to really connect with and earn the trust of the Black community. By expanding on the efforts of faith community nursing, like Alter, health systems can step up and offer their own special resources to provide advocacy and support tailored specifically for African Americans,” Epps said.

## FAITH IN ACTION

Alter is only one of multiple projects Epps and her team at the Faith Village Research Lab manages to improve access to dementia resources and conduct research through communities of faith.

Tasha Wilson, her husband, Kevin, and her mother, Fayretta Braggs, were connected to the Faith-Based Home Activity Toolbox, called the Faith-HAT study, through



Epps. The family qualified for the three-month study that collected information from activities they performed, survey responses and caregiver journal entries.

Braggs had initially suffered a stroke in 2021, which left significant damage to her brain. A diagnosis of vascular dementia hit the Wilsons hard as they became full-time caregivers and grappled with the complexities of navigating Braggs' health care, insurance and suitable support services. By participating in Faith-HAT, the family found just what they needed: solace and support.

"We loved the experience because it connected us with creative ways to spend time with God together as a family," Tasha Wilson said. "It was in those moments that I didn't feel as angry about mom's condition and was able to focus back on allowing God to be present in that moment."

The toolbox provided guidance on dementia-friendly music, videos, Bible scriptures and activities. The Wilsons created a routine using the tools, especially the selection of uplifting gospel music.

"Kevin and I would use the music playlist for the morning as we would get mom ready for adult daycare. We especially used it in the doctor's office or during hospital visits to keep her calm. Depending on the day, we would throw in the coloring and puzzle activities, but we stayed consistent with having dementia-friendly videos as our family time," Tasha Wilson said.

Fayretta Braggs died peacefully surrounded by family in 2023, but the ability to lean into their faith while having practical support is a happy memory the Wilsons treasure.

"This box gave us memories that I will cherish for a lifetime as we remember mom," Tasha Wilson said.

The outcomes from the Faith-HAT study have not yet been published, but the team anticipates feedback will be overwhelmingly positive.

## FINALLY BEING SEEN

The Wilsons now lend their experience and testimony to Caregiving While Black, an online course developed through Epps' team meant to teach African American caregivers how to navigate health care systems and home life and to manage their own self-care.

The six-week course includes participant interviews that will allow the team to examine each caregiver's sense of confidence in providing care for their loved one.

"Just having quality resources in this process is so vital and so valuable," Tasha Wilson said. "I am so thankful for Dr. Epps."

Epps is proud to know the impact these programs are having.

"For the first time ever, a lot of these communities feel they are finally being seen," said Epps. "I think that's the importance of my work. I hear them, I'm responding to them and I'm bringing it to them first. The communities I work with are now able to advise and influence future programs that can help all."

For more information about Epps or her projects, email [EppsF@uthscsa.edu](mailto:EppsF@uthscsa.edu). ■



### READ THE RESEARCH

Scan the QR code to find more research from Fayron Epps, PhD, RN, FGSA, FAAN.



## ANITRA MOSTACERO

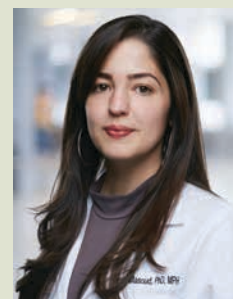
Anitra Mostacero is a retired U.S. Air Force senior master sergeant, a mother, a recent grandmother, reigning Miss Meridian Idaho 2024 and a person living with young-onset dementia. She was diagnosed in her early 40s.

Mostacero met Fayron Epps, PhD, RN, FGSA, FAAN, through her work with the Black Dementia Minds support group through the National Council of Dementia Minds.

"My focus is to combat stigma and share information about people living with dementia," Mostacero said. "We advocate like crazy. We speak to medical students, caregivers and church parishioners on how to live well and manage challenges. Dr. Epps is an important bridge for us and the council's advisory group. Her counsel is so important for everything we do."

# AMPLIFYING THE VOICES OF HISPANIC TEXANS

## The power of community pláticas for dementia care



Sara Masoud, PhD, MPH

In summer 2023, the School of Nursing launched a series of community pláticas in South Texas, aiming to gather insights directly from residents about their needs and experiences with dementia.

These pláticas, or discussions, are vibrant cultural events featuring festive décor, music and food. They draw attendees from diverse backgrounds, including local residents, community health workers and health professionals. Their creation was sparked from an evolution of work Sara Masoud, PhD, MPH, and her team initiated during her time with the school's Caring for the Caregiver program, established in 2016 by Carole White, PhD, RN, FAAN, and a team from the School of Nursing.

According to Masoud, assistant professor at the School of Nursing, there's a significant disparity in dementia research representation.

"For example, Hispanics are one and a half times more likely and African Americans are twice more likely than non-Hispanic white individuals to develop dementia, but they are not well-represented in the related data," she said.

With Hispanic Texans now the state's largest demographic, Masoud's and her team's work becomes even more crucial. The pláticas serve as platforms for residents to voice their needs.

"We hear things like, 'We need ambulance service and fire marshals.' What we think of as basic resources, not necessarily dementia care, are what communities want first," she said. "When we asked South Texans what they

think is important to study, among the issues they identified they wanted to address was to raise awareness of dementia in their communities and find ways to make getting a diagnosis easier."

Masoud said the South Texas region is one of the hardest hit in the country in terms of having the greatest number of counties with the highest incidence of Alzheimer's disease.

"The prevalence of dementia in some counties of South Texas is almost a quarter of their population. Programs across our university and organizations in the community are working to address this," she said.

Residents in South Texas also expressed a desire for non-pharmacological solutions for dementia's behavioral symptoms.

"Often when people think of dementia research, they think it is primarily to inform drug development to treat Alzheimer's disease, but we are hearing from those living in communities that are most impacted by dementia and they are not even there yet. They're in need of programs,

resources and interventions, not necessarily only pharmacological ones. Research in all of these areas is incredibly important," Masoud said.

Masoud, who is Palestinian, said she understands the struggle of representation, as the category of Middle Eastern and North African has only recently been added to the U.S. census, which is another gap of representation in research. She is currently expanding her research to include focus on building evidence around experiences of dementia among Arab and Arab American communities in Texas.

"Up until now, people like me essentially didn't exist in scientific representation," she said. "So, we still have work to do, but hearing directly from the people in our region supports us to be leaders in the research and the care that impacts us."

Visit [UTCaregivers.org](http://UTCaregivers.org) to join the conversation. ■

## HISPANICS ARE 1.5 TIMES MORE LIKELY TO DEVELOP ALZHEIMER'S COMPARED TO NON-HISPANIC WHITE INDIVIDUALS





*You can't just wake someone up in the middle of the night and ask how they're feeling or what's going on in their sleep.*

— Sara Mithani, PhD, RN

# The dream of **BETTER SLEEP** treatments

**A closer look at patient biomarkers may provide clues to the mysterious mechanisms of sleep disorders and chronic health conditions**

*By Jessica Binkley Lain*

**T**hroughout her career as a nurse and researcher, Sara Mithani, PhD, RN, assistant professor in the School of Nursing, made note of an interesting commonality among many of her patients. She found that individuals with varied health issues — from cardiovascular disease to cancer to mental health issues — would all describe a similar complaint: difficulty with their sleep.

“I was struck by the interplay between various health conditions and their connection to sleep quality and disturbance,” Mithani said. “We dedicate about a third of our lives to sleep, and it influences not only our daily well-being, but also our long-term health trajectories. But, despite how much we know, sleep still has a lot of mysteries.”

Mithani’s curiosity about this mystery led her down the path of sleep disorder research.

## Collection to connection

Researching sleep is complicated, as the very nature of it makes it difficult to study.

“You can’t just wake someone up in the middle of the night and ask how they’re feeling or what’s going on in their sleep,” Mithani said.

For that reason, Mithani’s research is focused on finding biomarkers of patients with sleep disorders. Her research employs a proteomic approach to understand the clinical and mechanistic presentations of sleep disorders in long-term chronic health conditions. By investigating the biomarkers, Mithani and her team examine the connections between physiological changes, the clinical symptoms of patients and the long-term impacts on their health.

“One significant observation among individuals with sleep disorders is their heightened risk for a

range of health problems,” Mithani said. Apart from experiencing difficulty sleeping, these patients often face increased risk of developing conditions like diabetes, hypertension, anxiety, other mental health issues and even cognitive impairment, she said.

Mithani works closely with an interdisciplinary team to collect blood and saliva samples to study which proteins, such as neurological, immune and inflammatory proteins, are being dysregulated. She aims to understand the underlying mechanisms involved in sleep disorders like insomnia and obstructive sleep apnea.

“There are a lot of layers to parse through to determine if the sleep disorder is a secondary diagnosis or the primary,” she said, which is why her research looks at the biomarkers.

## Sleep to live healthier

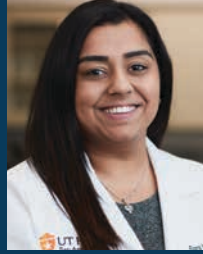
Recent findings in sleep research are revealing the integral role of sleep for neurocognitive functioning, Mithani noted. Quality sleep is not only necessary to be alert and functional throughout the day, but it also is critical for eliminating the neurotoxins from the brain each night. Inadequate or dysregulated sleep for prolonged periods cumulatively may lead to early presentations of neurocognitive deficits, Mithani said.

“This is worrying because many patients share that they are not sleeping well or feel they do not sleep well,” she said.

On the other hand, individuals with obstructive sleep apnea, for instance, may go undiagnosed for years because they think they’re sleeping fine, unaware that their sleep is disrupted. Then there are people with insomnia who know they have trouble sleeping, but they often brush it off as normal and try to ignore their symptoms. →

“It’s encouraging to see society now placing greater importance on sleep health, recognizing its role in overall





Sara Mithani, PhD, RN

well-being,” Mithani said. “It’s crucial for health care providers to advocate for sleep health, as it directly impacts not just daily lives, but also the long-term physical and mental well-being of the patients we serve.”

### A new gold standard

Collaborating with her clinician colleagues, Mithani’s investigation uses a personalized methodology. Along with biological samples, the research team collects information about a patient’s symptoms and their particular medical history.

Mithani examines various trends such as changes in the trajectory of sleep-related symptoms. She also studies patients who have similar experiences but different sleep presentations, medical histories

or pathways that put certain individuals at higher risk, and any underlying genetic differences that are exacerbating their symptoms. All this research aims to identify patients who are likely to respond well to specific treatments for sleep disorders and assess how these treatments affect their physiological health.

Gold standard treatments for sleep disorders, typically behavioral therapy, pharmacotherapy, or a combination, can vary among individuals. So, what works best for one person may not be as effective for another, Mithani noted. While these treatments are considered best practice based on general efficacy, personalized approaches are necessary for optimal outcomes.

“The gold standards in science and health care are not static and can evolve over time in response to new discoveries and emerging research,” she said. “The dream for sleep health research would be to develop personalized interventions tailored to each person’s unique sleep needs, personal history, genetics, lifestyle and environments.” ■

## Biobehavioral Laboratory and biobank

The Biobehavioral Laboratory within the School of Nursing offers comprehensive services for researchers in need of wet lab and behavioral suite facilities. Classified as a Biosafety Level 2 facility by the university’s Department of Environmental Health and Safety, the wet lab specializes in conducting assays involving saliva and blood and is equipped to manage various biological samples from local and national studies.

The lab also provides storage and testing services, including specimen collection, diagnostic ordering and neuropsychological testing using advanced tools such as the Wisconsin Card Sorting Test. The lab’s active collaboration with LabCorp ensures that assays beyond its capabilities can be seamlessly conducted. For inquiries and collaborations, email laboratory director Chun-Liang Chen, PhD, at [ChenC4@uthscsa.edu](mailto:ChenC4@uthscsa.edu).



Chun-Liang Chen, PhD, (right), professor and director of the Biobehavioral Laboratory and biobank

# PRECISION HEALTH: NOT A ONE-SIZE-FITS-ALL APPROACH

Researchers are leveraging technology, bioinformatics and omics data to understand how lifestyle interventions can be tailored to individual patients



By Kate Hunger

The conventional advice patients at risk for cardiovascular and other chronic diseases often receive sounds straightforward enough: Eat well and exercise. But researchers at the School of Nursing know that patients are individuals — and that to be effective, interventions are not one-size-fits-all.

Enter precision health. Nurse scientists at the school are seeking ways to create effective lifestyle interventions to improve outcomes for patients with chronic health conditions, such as high blood pressure and Type 2 diabetes. And they are taking both a micro and macro view of factors in patients’ genomic and metabolomic data, as well as qualitative data — including the availability of community support and human interaction.

### OPTIMIZING OMICS TO IMPROVE OUTCOMES

Assistant Professor Jisook Ko, PhD, RN, has conducted several research projects using a precision nutrition framework to examine the effectiveness of self-management of dietary interventions designed for patients with high blood pressure or Type 2 diabetes.

“I just want to help them to make it easier to manage their chronic conditions,” she said.

Ko has focused her research on examining the effect of a low-sodium diet intervention on metabolites in participants with high blood pressure, including identifying and studying participants who are genetically salt sensitive. And as principal investigator of a pilot study,



*I just want to help them to make it easier to manage their chronic conditions.*

— Jisook Ko, PhD, RN

Ko is investigating how personalized nutritional advice and intervention affects metabolites in participants with Type 2 diabetes.

In both studies, participants used a mobile dietary tracking app to log what they ate and digital fitness tracking devices to monitor their physical activity. Ko is comparing the metabolomics taken by blood or urine samples, depending on the study, and comparing that data to what participants logged.

“Looking at the metabolomics profiling, I can see that even though we are eating the same amount of sodium or same amount of sugar, our bodies are responding so differently, according to age, sex, ethnicity and other factors,” Ko said.

The ability to share what is happening in their cells with a patient is powerful information, Ko added.

“Looking at the comprehensive assessment in terms of responses to dietary or lifestyle modifications is really helping to convince my patients,” she said. “From there, I can provide more personalized and more individualized advice based on their current profiling.”

Recommending special diets and asking study subjects to log their progress is not enough, Ko said.

“That doesn’t work,” she said. “But if we just look at their data, their profiling, then they can understand why [they are] here and why [their] current status is looking like this.”

## CONSIDERING LIFESTYLE FACTORS

Early in her career, School of Nursing Assistant Professor Yan Du, PhD, MPH, RN, worked as a bedside nurse in an intensive care unit.

“I saw a lot of people with severe, chronic health conditions, like multiple organ failures and very severe conditions in the ICU,” she said. “I realized that a lot of the severe conditions can be prevented if they can manage their chronic conditions well at their home or in the community.”

Du studies the effect of biological and psychosocial factors on an individual’s lifestyle behaviors and, ultimately, their health outcomes. One of her research projects, a collaboration with Kumar Sharma, MD, FAHA, FASN, chief of the Division of Nephrology and director of the Center for Precision Medicine in the Joe R. and Teresa Lozano Long School of Medicine, examines the effect of a technology-assisted ketogenic diet on cardio-renal-metabolic health.

In that study, the 60 participants were either overweight or obese, and some had either Type 2 diabetes or early-stage chronic kidney disease. Half of the study group was put on a ketogenic diet, while the other half was given a low-fat diet. All participants received digital fitness trackers and were asked to monitor and log their daily physical activity and food intake and record their weight. Participants with Type 2 diabetes were asked to monitor their blood glucose.

In order to check compliance with the ketogenic diet, researchers confirmed subjects achieved ketosis by

measuring ketones in their blood, said Christiane Meireles, PhD, RDN, a clinical associate professor in the School of Nursing who designed the ketogenic diet used in the study and served as a co-investigator.

“In terms of nutrition, health technology can help people increase their awareness of food choices to support lifestyle change because you have real-time feedback when self-monitoring food intake, for example. You have the response right there in front of you at any time,” Meireles said.

Study participants also received individualized, interactive, self-paced digital health lessons. Researchers then imported the data into a platform at the School of Nursing’s Center on Smart and Connected Health Technologies to give the participants personalized feedback on their progress.

“From a precision lifestyle intervention perspective, the magic word is there is no one-fits-all treatment or intervention,” Du said. “We found for both [diet] groups there were some health outcomes improved, and there were some health outcomes not improved in both groups as well.”

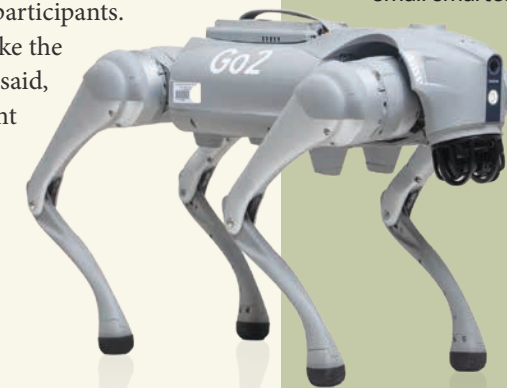
Du and her interdisciplinary team of research colleagues has been assessing the microbiome and metabolite responses to the lifestyle intervention, aiming to develop innovative and effective lifestyle interventions individualized to each person. They also added another layer to their research: using patients’ self-monitoring behaviors to predict health outcomes.

“We found that maybe based on their self-monitoring behavior at the beginning of the intervention, we can actually assess who might get the benefit of the intervention and who might not, at the very early stage. We can intervene [with] who needs extra intervention.”

## MEASURING SOCIAL IMPACTS

The ketogenic study also revealed the importance of a patient’s lived experience in the success of a lifestyle intervention, Du said. She is conducting another study that aims to take the lifestyle intervention directly to the community, where people live. In that study, researchers will provide digital lessons facilitated by community health workers at a senior day activity center to infuse human connection into the learning piece. The study will consider the social support, cultural adaptation and access to organizational and community resources needed to meet the needs and preferences of the study participants.

“We are trying to see how we can make the lifestyle intervention personalized,” Du said, “not only to their genetics or their current health conditions or behaviors, but also to their environment — not only their physical environment, but also their social environment.” ■



## Center on Smart and Connected Health Technologies

The School of Nursing’s Center on Smart and Connected Health Technologies reopened in 2024 with renovated space and a sharpened mission to serve as a hub that integrates innovative technology with human-factor principles in research, education and clinical practice.

The center is designed to help faculty, students and members of the scientific community conduct research, analyze data and collaborate on projects. The center facilitates academic-industry collaboration on usability and clinical testing and provides consultation on design, development, testing and deployment of mobile health, connected health and telehealth solutions. Rigorous data collection, curation and interdisciplinary collaboration are cornerstones of the center’s success.

The center’s director, School of Nursing Vice Dean of Research and Scholarship Lixin Song, PhD, RN, FAAN, emphasized the center’s focus on human-centered design and responsible use of technologies including artificial intelligence and sensors.

“No matter how much technology evolves and improves, in the end we need to serve the people,” she said. “We need to serve the patient, family caregiver and community.”

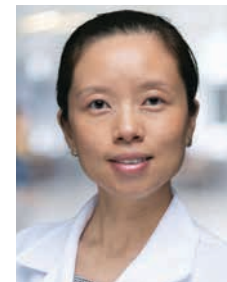
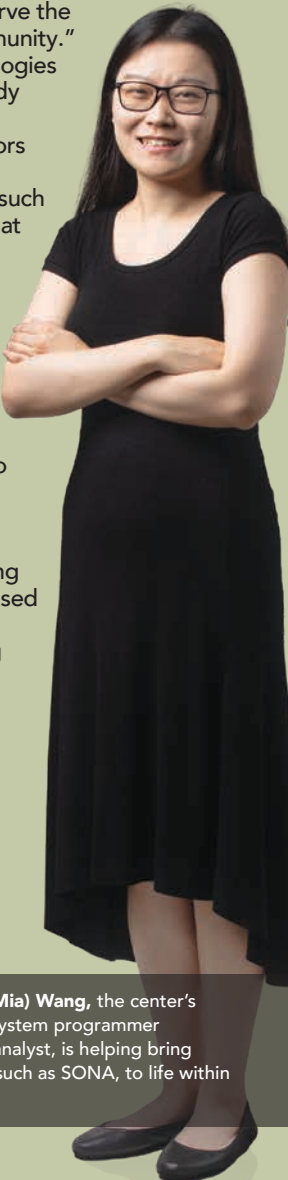
In addition to wearable technologies and fitness trackers and a user study room, the center features new technologies, including smart mirrors that can be used to help patients practice new self-care procedures such as ostomy care in the hospital and at home, a screen-based eye tracker and eye-tracking glasses, and a robot “dog” called SONA (School of Nursing Assistant) that can be programmed to monitor health indicators, assist in therapy and more.

“Our center is committed to exploring innovative solutions to improve patient care and support caregivers, alleviating burdens on health care professionals facing burnout and time constraints,” Song said, adding that the center is focused on decreasing health disparities.

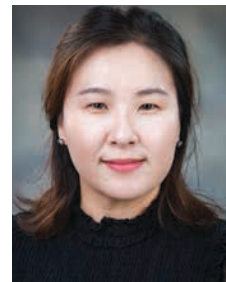
“Technology should be helping people instead of being a barrier,” she said.

For more information about the center and its services, email [smartcenter@uthscsa.edu](mailto:smartcenter@uthscsa.edu).

Xiaomeng (Mia) Wang, the center’s application system programmer and system analyst, is helping bring technology, such as SONA, to life within the school.



**Yan Du  
PhD, MPH, RN:**  
Research focuses on improving chronic disease management and patient independence.



**Jisook Ko  
PhD, RN:**  
Expertise in self-management of chronic diseases and nutrition.



**Christiane Meireles  
PhD, RD, LD:**  
Specializes in medical nutrition therapy, program planning and patient education.





# EMPATHY IN MOTION

**A street nursing education model teaches students compassionate care**

By Orith Farago

In 2019, The University of Texas Health Science Center at San Antonio's School of Nursing partnered with Corazon Ministries — a nonprofit organization that provides needed resources to the city's most vulnerable populations — to introduce a new clinical site option for undergraduate nursing students.

The school's street nursing program allows students to see the homeless community through a lens of empathy.

"You actually think of how you help the human being — not the protocols, not the institution," said street nursing clinical rotation founder Diana Cavazos, PhD, MHSA, MSN, School of Nursing associate professor. Cavazos said students learn not to stigmatize, not make assumptions and, most importantly, to hear the patient's story.

As part of the Population Focused Health course, students take a theory class, and then once each week, they implement what they learn by going to a local business on the city's West Side to provide first aid, wound care and more to the homeless population in collaboration with Corazon Ministries.

## TRIBUTE ONLINE

To read the full story and hear more from students about their firsthand experiences providing care within the homeless community, go to *Tribute* online at [magazines.uthscsa.edu/schools/tribute](https://magazines.uthscsa.edu/schools/tribute).

Three nursing students — armed with basic medical supplies — set out to offer care to individuals experiencing homelessness on the streets of downtown San Antonio. The School of Nursing's Population Focused Health course advances an educational model that promotes compassionate care.

## Calling all alumni to share their news and updates!

Dear School of Nursing graduates,

As the Alumni Council Chair, I'd like to reinforce the importance of our alumni network and to invite you to stay connected with us by sharing your personal and professional updates.

At the UT Health San Antonio School of Nursing, we're not just a community during our time on campus. We're a lifelong network of professionals dedicated to making a difference in the field of nursing. Our Alumni Council is committed to fostering this sense of connection and support among our graduates, and your participation is crucial in keeping our community vibrant and thriving.

Whether you've recently achieved a career milestone, embarked on a new venture or experienced personal growth, we want to hear about it! Your achievements inspire us all and serve as a testament to the impact of our nursing education.

By sharing your updates, you not only celebrate your accomplishments, but also provide valuable insights and inspiration to your fellow alumni. Your experiences can offer guidance to those just starting their careers and reinforce the bond that unites us all as UT Health San Antonio graduates.

Additionally, staying connected with your alma mater opens doors to networking opportunities, professional development resources and the chance to give back to future generations of nurses.




So, I encourage you to take a moment and visit [forever.uthscsa.edu](https://forever.uthscsa.edu) to share your news with us. Whether it's a brief update or a more detailed account of your journey since graduation, your contributions are invaluable for keeping our alumni community vibrant and connected.

Thank you for your continued support, and I look forward to hearing from you soon!

Respectfully,  
Tricia Garcia-Choudary, MPH, BSN, RN  
Class of 2014  
Alumni Council Chair



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