UTAhealth

2025

THE UNIVERSITY OF TEXAS AT ARLINGTON \ COLLEGE OF NURSING AND HEALTH INNOVATION

GIVING FUTURE NURSES A HEAD START

UTA's Nursing Academy helps fast-track high school students' careers.

A UTA nursing capping ceremony from 1955. The University is celebrating its 130th anniversary this year. You can take a look back and share your memories at **uta.edu/130**.

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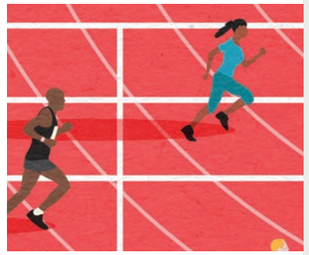

ON THE COVER: NEIL WEBB

UTAhealth

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UTA College of Nursing and Health Innovation

NOTES FROM THE INTERIM DEAN

"OUR COLLEGE PROUDLY UPHOLDS AND ADVANCES UTA'S TRADITION OF EXCELLENCE IN EDUCATION, RESEARCH, PRACTICE, AND SCHOLARSHIP"

The University of Texas at Arlington College of Nursing and Health Innovation is dedicated to being a leader in advanced research, quality education, and innovation. In this publication, you will discover the remarkable milestones our college has achieved over the past year. I am excited for you to read about the outstanding contributions of our faculty, staff, and students to the continuous progress within CONHI and UTA.

Highlighted stories in this issue include:

- The launch of the cutting-edge Mobile Simulation Lab: This 40-foot commercial vehicle, equipped with three simulation bays and advanced patient manikins, is bringing education and training directly to students in rural areas.
- The Nursing Academy Program: This initiative creates a tailored experience and seamless transition for high school students interested in pursuing a Bachelor of Science in Nursing (BSN) at UTA.
- The Arlington Student on Health Aging: Faculty, students, and community researchers are conducting this study at our new Clinical Imaging Research Center on campus.
- The implementation of new technology to improve care: We are leading the way in educating undergraduate nursing students on the use of the Electronic Health Record (EHR). Our training EHR will facilitate new BSN graduates' transition to nursing practice.

Additionally, you will read about CONHI students who are gaining national recognition for their innovative research, alumni who have become industry leaders in their respective fields, and more.

By embracing innovation, conducting research, fostering partnerships, and engaging with our community, we are a forward-thinking college committed to a strategic vision. This publication offers a glimpse into how our college contributes to *UTA 2030: Shared Dreams, Bright Future*, President Jennifer Cowley's University-wide strategic plan.

We hope you enjoy learning more about the accomplishments and efforts within the college. Your support and interest in CONHI are greatly appreciated as we continue to provide innovative, exceptional education through research and practice, advancing health and the human condition globally.

Tanya Sudia, PhD, RN, FNAP, FAAN
Interim Dean and Chief Nursing Officer, College of Nursing and Health Innovation

NEW FACULTY HIRES

UNDERGRADUATE NURSING

UMBER DARILEK
Assistant Professor

CHARLYN GILMORE
Clinical Assistant Professor

MARKEYA HOOD
Clinical Assistant Professor

VERONICA KING
Clinical Assistant Professor

JESSICA MONSEVALLES
Clinical Assistant Professor

ANDREA NUTTING
Clinical Assistant Professor

MARIA GIL RECALDE
Clinical Assistant Professor

TREVOR RICHARDS
Clinical Assistant Professor

GLORIA-GRACE ROSE
Clinical Assistant Professor

CHRISTINA STACY
Clinical Assistant Professor

ROSE WIMBISH-THOMPKINS
Assistant Professor

Not pictured:
DARYL HOGAN
Clinical Assistant Professor

GRADUATE NURSING

KATIE SANDLIN
Clinical Assistant Professor

KIRA SHORT
Clinical Assistant Professor

KIMBERLY THOMPSON
Assistant Professor

JENNIFER WOO
Assistant Professor

KINESIOLOGY

ANN AMUTA-JIMENEZ
Associate Professor

SHIKHA PRASHAD
Assistant Professor

2023-24 GLOBAL ENROLLMENT

20,059

NURSING

18,054

Baccalaureate = **12,495**
Master's = **4,940**
Doctoral = **331**
Other = **288**

First Generation = **9,089**
Non-First Generation = **8,965**

KINESIOLOGY

2,005

Baccalaureate = **1,839**
Master's = **147**
Doctoral = **17**
Other = **2**

First Generation = **907**
Non-First Generation = **1,098**

2023-24 GRADUATES

4,135

NURSING

3,681

Baccalaureate = **2,528**
Master's = **1,023**
Certificate = **65**
Doctoral = **65**

KINESIOLOGY

454

Baccalaureate = **404**
Master's = **48**
Certificate = **0**
Doctoral = **2**

CLINICAL PLACEMENTS

UNDERGRADUATE NURSING
Placements = **4,740**
Sites = **102**

GRADUATE NURSING
Placements = **3,986**
Sites = **1,914**

MASTER OF SCIENCE IN ATHLETIC TRAINING
Placements = **62**
Sites = **32**

CONHI SCHOLARSHIPS AWARDED*

FY 2024 **$697,499***

**total includes endowed scholarships and others from fellowships, grants, and Dream Makers*

UTAhealth

FY 2024 GRANT PROPOSAL SUBMISSIONS

136 **$97,505,366**

FY 2024 SPONSORED PROJECTS*

36 **$6,039,553**

**new and continuing*

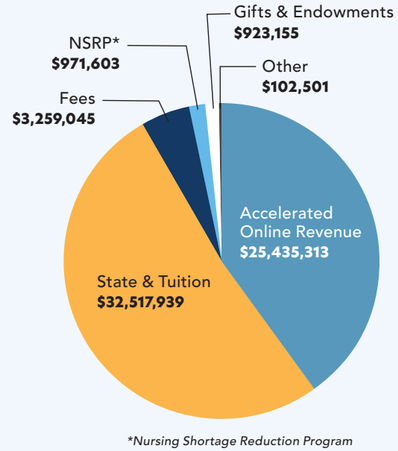
FACULTY

Both on campus and online

NURSING
Full time = **121**
Part time = **510**

KINESIOLOGY
Full time = **32**
Part time = **23**

2023-24 SOURCE OF FUNDS



**Nursing Shortage Reduction Program*

$63,209,556

From left: Noelle Fields, Laura Kunkel, Tracy Orwig, Kimberly Siniscalchi, Jennifer Roye, Elizabeth Merwin, and Tanya Sudia

UTA WELL-REPRESENTED AT NATIONAL FORUM

Faculty members presented—and were honored—at the annual NAP conference

The University of Texas at Arlington had excellent representation from the College of Nursing and Health Innovation and the School of Social Work at the National Academies of Practice (NAP) 2025 Annual Meeting and Forum, held March 13–15 in Washington, D.C.

Jennifer Roye, assistant dean for simulation and technology, partnered with Tracy Orwig, director of interprofessional education for the School of Social Work; Noelle Fields, associate professor of social work; Karen Magruder, program director for the Doctor of Philosophy in social work; and UT Southwestern's Bau Tran to present "Synchronizing Success: Strategies for Multi-Site Interprofessional Education in Discharge Planning." Laura Kunkel, director of the athletic training program, presented the poster "Athletic Trainers in the Interprofessional Sport-Related Concussion Management Team."

At the forum, inductees to NAP were honored, including new distinguished fellows Elizabeth Merwin, professor of nursing, and Kimberly Siniscalchi, professor of practice, and Dr. Roye as a new professional member.

The NAP is a nonprofit organization founded in 1981 to advise governmental bodies on health care. Distinguished practitioners and scholars are elected by their peers from multiple health professions. The organization comprises 17 different professional academies, and membership requires nomination by another member or fellow, an application with rigorous review, a recommendation by the academy of their profession, and final approval by the NAP Council.

Other CONHI representation at the forum included Tanya Sudia, interim dean and chief nursing officer. Representing UTA in the NAP Leadership Council, Dr. Kunkel also began her term as chair-elect of the Athletic Training Academy.

Celebrating Women in Science

Seminar speaker led groundbreaking research on women's heart health

Earlier this year, the College of Nursing and Health Innovation celebrated its fourth annual Florence Haseltine Women in Science Seminar, with C. Noel Bairey Merz, MD, as the distinguished speaker. Dr. Bairey Merz, a renowned cardiologist, holds the Women's Guild Chair in Women's Health and is director of the Barbra Streisand Women's Heart Center and the Preventive Rehabilitative Cardiac Center at Cedars-Sinai's Heart Institute.

"Dr. Bairey Merz is a pioneering cardiologist dedicated to advancing women's heart health," says Michael Nelson, associate professor of kinesiology. "She has led groundbreaking research on sex-specific heart disease, focusing on coronary physiology, preventive cardiology, and advanced cardiac imaging. Through her extensive research and leadership, Dr. Bairey Merz continues to be a vital force in closing the knowledge gap in women's cardiovascular health."

In her presentation, "Ischemic Heart Disease in Women: Update 2025," Bairey Merz discussed her research interests in women and heart disease, including how mental stress and nutrition can contribute to heart disease and the role of exercise and stress management in reversing disease. She aimed to leave attendees with a deeper understanding of the symptoms and signs of ischemic heart disease.

"Considerable evidence now documents that this syndrome is associated with a prognosis that is clearly not benign, yet no clinical practice management guidelines exist for these patients," Bairey Merz says.

Her research aligns with CONHI's mission to advance global health and the human condition through transdisciplinary collaboration, fostering a culture of innovation and leadership in discovery.

"CONHI's values align well with Dr. Bairey Merz's commitment to advancing cardiovascular health and addressing sex-specific health issues," Dr. Nelson says. "Her work has been instrumental in uncovering sex differences in heart disease symptoms and treatment responses, leading to more effective and personalized care for women."

From left: Michael Nelson, Florence Haseltine, Noel Bairey Merz, and Paul Fadel

Mobile Lab to Address Rural Health Care Crisis

UTA brings life-saving training to those who need it most

Texas has the most rural residents of any state, with nearly 3 million people spread across a vast landscape. If rural Texas were its own state, it would rank as the 36th most populous.

Yet rural Texans face significant barriers to health care that their urban counterparts do not. More than a quarter of the state's 172 rural counties lack a hospital, and those with at least one often struggle with a shortage of qualified health care personnel, such as nurses and first responders.

To address these growing challenges, UTA introduced its new Mobile Simulation Lab in March. It's the first in Texas dedicated solely to rural training.

This educational milestone was celebrated at a launch party at UTA's School of Social Work/Smart Hospital building. Officials from UTA, including President Jennifer Cowley, and Arlington Mayor Jim Ross attended. Every major DFW news outlet was on hand, too, with coverage being picked up nationally by outlets including Yahoo! News.

"Today we're not just unveiling a new resource—we're making history," Dr. Cowley said. "As a university, we are committed to student success, alumni and community engagement, and research and innovation. And y'all, this lab checks all those boxes."

Mayor Ross describes the Mobile Simulation Lab's mission as a "game-changer" for enhancing access to quality health care in the state's rural communities.

The $1 million mobile unit, a 40-foot commercial vehicle, is equipped with three simulation bays and three advanced patient manikins, one of which simulates childbirth, including cesarean sections and other obstetric emergencies.

A lack of obstetrical services is one of the more pressing health care challenges in rural counties in the state. Fewer than half of Texas' rural hospitals provide maternity care, leaving many residents without essential services.

"When it comes to obstetric or delivery emergencies, rural patients are at higher risk for poorer outcomes than their urban counterparts," says Jennifer Roye, assistant dean for simulation and technology. "That is all the more reason to train those nurses out there on how to take care of emergency situations to save moms and save babies."

Access to care continues to decline. In the 1960s, Texas' rural counties had 300 hospitals, nearly double the number that exist today. The past decade alone has seen more than 20 rural hospitals shut their doors.

By bringing advanced training directly to rural areas, UTA's Mobile Simulation Lab will help local health care providers expand their expertise, enabling them to deliver essential care within their communities and reducing the need for costly travel to distant training centers.

Expanding the nursing workforce shortage in rural areas is vital to improving the health of Texans statewide. Rural communities face higher rates of chronic illness and limited access to care, with heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke among the leading causes of death, according to the Centers for Disease Control.

"Investing in rural nursing education is an investment in the health and longevity of entire communities," says Aspen Drude, manager for the Center for Rural Health and Nursing. "By equipping local providers and our UTA students with advanced skills, we not only improve patient outcomes, but also strengthen the rural health care infrastructure that so many Texans rely on."

Faculty showcase the obstetrics manikin at the launch party

Showcasing Innovative Research at Geriatrics Seminar

Past and current Moritz Chair holders unite to shed light on current trends

The Clinical Translation Research Forum (CTRF) is a series of weekly seminars rooted in supporting CONHI faculty researchers. Hosted by the Center for Research and Scholarship, the principal source of research and scholarship support for faculty in CONHI, the CTRF provides a platform for sharing innovative research.

One of the seminars this year welcomed back a familiar face and offered the opportunity to recognize an exceptional endowment within the college. The March 26 event was hosted by Paul Fadel, professor of kinesiology, associate dean for research, and the Moritz Chair in Geriatrics, for which he holds a three-year appointment.

Dr. Fadel invited former UTA faculty member and Moritz Chair in Geriatrics holder Mark Haykowsky to present. Dr. Haykowski is the director of the Integrated Cardiovascular Exercise Physiology and Rehabilitation lab and a faculty member at the University of Alberta.

"This was a great opportunity to bring Mark back to UTA and present," says Fadel. "It was appropriate to have him here for the reinitiation of the seminar series since he originally created it when he held the Moritz chair."

Haykowsky expressed his enthusiasm about returning to CONHI.

"The opportunity to reconnect with colleagues and meet with John David Moritz, the Moritz Chair in Geriatrics endowment donor, made the visit even more meaningful," he says. "Seeing the University's continued growth and evolution was both inspiring and exciting, reinforcing a deep sense of gratitude for past contributions and enthusiasm for the future of aging and health outcomes research at UTA."

His presentation, titled "Aortic Wall Stress and Remodeling: From Healthy Aging to Athletic Adaptation and Pathological Dilation," focused on current trends in aging research. However, Haykowsky hopes attendees left with an additional takeaway.

"Beyond the scientific insights, I hope attendees gained an appreciation for the importance of thinking outside the box," Haykowsky says. "Creativity and the willingness to question existing assumptions are essential in advancing any field of research. I encourage them to embrace curiosity and push the boundaries of conventional understanding in their work."

Mark Haykowsky

Looking ahead, Fadel envisions this seminar as a vital platform to disseminate current research in geriatric health within CONHI, UT Arlington, and the greater community.

"I am honored to hold the Moritz Chair in Geriatrics and look forward to hosting this seminar series each spring, aligning with the advancements we are making in our aging research efforts," Fadel says.

STAFF AWARDS

Stephanie Witcher

OUTSTANDING UNDERGRADUATE PROFESSIONAL ADVISOR

Kinesiology Academic Advisor Stephanie Witcher was chosen as the staff winner for the Outstanding Undergraduate Professional Advisor award during the UTA Advisor Excellence Awards Ceremony.

Courtney Jackson

OUTSTANDING MAVERICK

Kinesiology Advisor Courtney Jackson was chosen as the recipient of the Outstanding Maverick Award. The award recognizes exceptional contributions to the University and those who exemplify its core values of collaboration, engagement, excellence, innovation, and integrity.

Using VR to Train Workers in Veteran Suicide Prevention

UTA helps bridge the mental health care gap for veterans in rural areas

There's a significant shortage of mental health professionals across Texas, and veterans living in rural areas face heightened risks of suicide, particularly through the use of firearms.

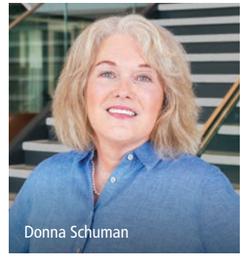
The vast majority of the state's counties—246 of the 254—are designated as mental health professional shortage areas by the Texas Department of State Health Services. Nationally, nearly three-quarters of veteran suicides involve firearms, a highly lethal method, compared to just over half among non-veterans, says Donna Schuman, a social work assistant professor.

To tackle these challenges, researchers at UTA are developing a virtual reality (VR) training simulation to enhance rural health workers' ability to care for veterans experiencing suicidal thoughts. This innovative program focuses on teaching health care providers how to talk to veterans about how they store items (like firearms, medications, or sharp objects) to reduce the risk of harm, especially in situations involving mental health crises or suicidal ideation.

The project is led by Dr. Schuman, whose deep connection to the veteran community shapes her work. As a veteran spouse and the mother of a son who served as a combat medic, Schuman brings a personal perspective to the initiative. Her career before academia, including roles in behavioral health with the Department of Veterans Affairs and the U.S. Army, further fuels her commitment.

"This is where my desire to do research in this area stems from," she says. "It inspired me to explore non-traditional interventions like VR and focus on suicide prevention."

Initial funding for the project came from CONHI's Center for Rural Health and Nursing and UTA's Center for Research on Teaching and Learning Excellence. In July, Schuman also secured a two-year mentored grant from the American Foundation for Suicide Prevention. Her interdisciplinary Veteran Suicidality Assessment Virtual Reality team includes researchers, graduate assistants, and interns from social work, nursing, art, and psychology. Among them are four graduate research assistants who are veterans themselves, lending authenticity and a veteran-centered lens to the training content and ensuring it resonates with the lived experiences of those it aims to serve.



Donna Schuman

SuLynn Mester

Using VR to enhance rural health workers' ability to care for veterans experiencing suicidal thoughts

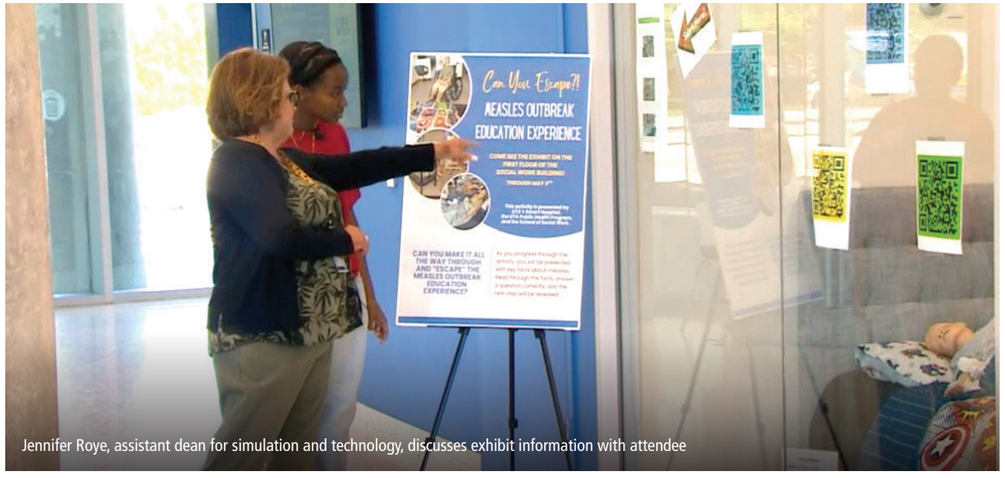
Using Meta Quest 3 headsets, the VR simulation recreates real-life encounters with veterans contemplating suicide by lethal means, such as firearms. This immersive experience helps providers recognize warning signs, practice intervention strategies, and gain confidence in managing high-risk scenarios.

"Many rural health workers lack specialized training in veteran suicide prevention, yet they're often the first point of contact for veterans in crisis," Schuman explains. "By using immersive VR, we can help them build the skills and confidence to handle these situations."

SuLynn Mester, a clinical assistant professor in the Center for Rural Health and Nursing and a co-investigator on the project, sees this as more than just research.

"It's a movement toward healing and understanding, ensuring that every veteran has local help when they need it," Dr. Mester says.

The program is in its early stages, with plans to begin testing with rural Texas health care providers this fall. The initiative marks a vital step toward bridging the mental health care gap for veterans in underserved rural areas, empowering health workers with the tools to save lives. Schuman, Mester, and their team have great affection for rural veterans as a population, and this project reflects their deep commitment to improving access to life-saving mental health care.



Jennifer Roye, assistant dean for simulation and technology, discusses exhibit information with attendee

UTA Addresses Measles Outbreak Through Education

CONHI Smart Hospital undertakes interactive campaign to raise awareness of the disease

When the COVID-19 outbreak hit just a few years ago, Erin Carlson, an associate clinical professor and the director of graduate public health programs, played an active role in discussing its severity and the importance of securing a vaccine.

Flash forward to 2025, and there is a new outbreak that requires swift action: measles. More than 700 cases of measles were confirmed in Texas as of July, and 98 people have been hospitalized so far, according to the Texas Department of State Health Services. Dr. Carlson says the erosion of trust in the unequivocally safe and effective measles, mumps, rubella (MMR) vaccine is dangerous for public health and safety.

"We have decades of research. There are devastating complications from measles, but we don't see these types of complications or side effects from the vaccine. It is 97% effective against measles," Carlson says.

She adds that taking preventive action can help protect your community and loved ones.

"Vaccinations also benefit our neighbors. Maybe your own child is very healthy and robust, but you may have another child in your community who cannot be vaccinated for medical reasons," Carlson says. "We all can do our part to keep the most vulnerable from getting sick."

In April, the CONHI Smart Hospital launched an interactive "Measles Outbreak Education Experience" inside its home health suite. Passersby could view and interact with the suite—a small, windowed, home-like space containing rooms and manikins that represent family members who may be immunocompromised. Participants walked through the rooms and scanned QR codes to answer questions about transmission and learn about the severity of the outbreak. The goal was to create an interactive educational experience to raise awareness about the disease.

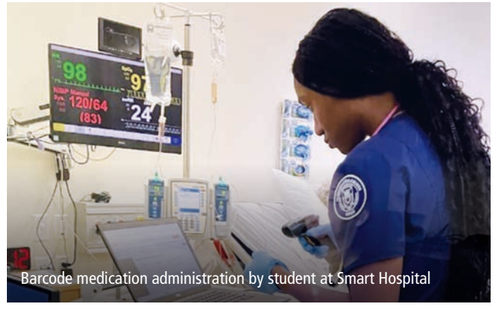
"We wanted it to be very visible," Jennifer Roye, assistant dean for simulation and technology, told WFAA's Tiffany Liou, who covered the event. "It all stems from one of our employees who was taking a trip to the beach and wondered about measles transmission for her 9-month-old."

The exhibit, which ran through May 9, was a success, with many students stopping by the suite to learn more about how to stay safe from the measles. "I think this is a really fun way to have people interact and learn at the same time," a student added.


Erin Carlson

CONHI Trains Students on Electronic Health Records

Learning to navigate EHRs helps future nurses effectively care for patients



Barcode medication administration by student at Smart Hospital

The College of Nursing and Health Innovation is leading the charge for change. Over the past two years, CONHI faculty have collaborated with the Center of Innovation in Health Informatics (CIHI) to integrate the clinically oriented use of academic Electronic Health Records (aEHRs) into nursing curriculum. Exposing CONHI nursing students to EHR training helps them better understand the digital interfaces they will encounter in their work, while also addressing the anxieties associated with using unfamiliar systems.

CONHI's continual integration of aEHRs into the nursing curriculum has taken time and strategic planning to execute. Thankfully, Provost Tamara Brown, CONHI Interim Dean Tanya Sudia, CIHI Executive Director Marion Ball, and many others have supported the integration throughout the entire process.

Nationwide discussions on aEHRs and nursing curricula gained momentum in 2021 when the American Association of Colleges of Nursing updated its practice essentials to emphasize academic-practice partnerships and a competency domain focused on informatics (another term for information science). This discussion resonated with UTA faculty and led to the selection of EHR Go as the software program of choice for implementation into the curriculum.

"Health informatics industry experts and stakeholders must join together to address workforce well-being and the EHR documentation burden among practicing nurses," says Mari Tietze, professor and director of the master's program in health informatics. "This research offers an important value equation for early EHR exposure, including reduced new graduate orientation length and improved workforce well-being. Educators and practice administrators can collaborate to foster workforce health information technology competency as a strategy to promote health care quality and prevent adverse health events."

CONHI's state-of-the-art Smart Hospital has played a key role in the successful integration of aEHR training for nursing students, allowing for firsthand experience in administering and documenting medications as they would in real clinical settings.

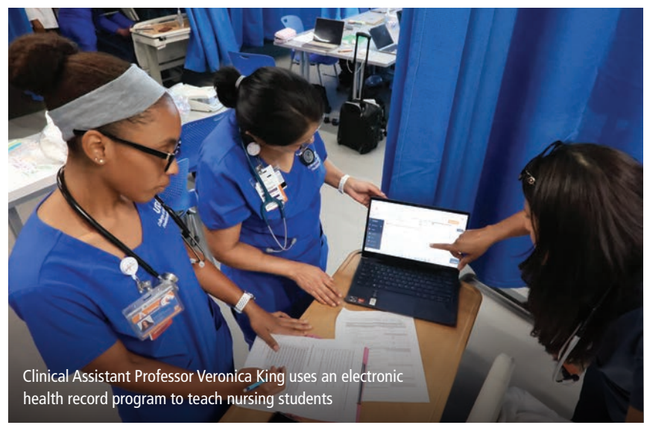
"By learning to navigate the EHR as part of their simulation activities, students are better equipped to plan and deliver patient care effectively," says Jennifer Roye, assistant dean for simulation and technology. "This hands-on practice fosters a deeper understanding of workflow, documentation standards, and interdisciplinary communication—all critical elements of patient safety."

The implementation process has also led to collaborations with fellow experts, such as Alaina Tellson, the vice president of nursing excellence and professional development at Baylor Scott & White Health.

"Given the fast-paced world of artificial intelligence influence in health care delivery and documentation, it is critical that graduating nurses have a sound understanding and skills for basic EHR-based documentation," Dr. Tellson says. "Through a grant-funded opportunity from the American Association of Colleges of Nursing, we worked with CONHI in its aEHR implementation to maximize the students' EHR use and documentation skills."

In just two years, approximately 2,000 UTA nursing students have been able to learn and work with aEHRs.

"The program has led to overall positive feedback, with one student telling me, 'I finally feel like a nurse—prepared for electronic health documentation,'" Dr. Tietze says.


Clinical Assistant Professor Veronica King uses an electronic health record program to teach nursing students

CONHI happenings

MOBILE SIMULATION LAB

PUBLIC HEALTH WEEK

CLINICAL EXCELLENCE

SKILLS AND VR LAB

CONHI RESEARCH EXPO

SIGMA THETA TAU INDUCTION

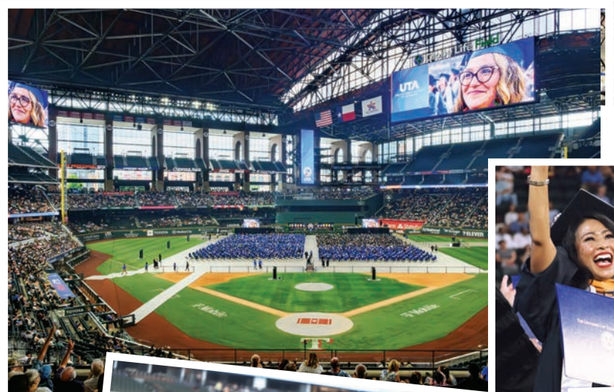
RETIREMENT CELEBRATION

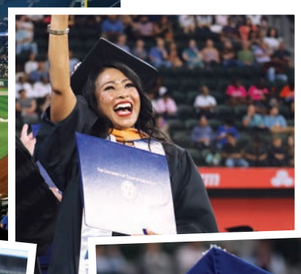
TEXAS HEALTH INFORMATICS ALLIANCE

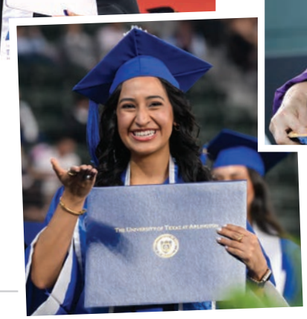
BSN PINNING CEREMONY

SNAPSHOTS OF ACHIEVEMENT

From ribbon-cutting events to celebrations of lauded careers to commencement ceremonies for our incredible graduates, CONHI has experienced a very busy, fun, and exciting year!







COMMENCEMENT

Giving Future Nurses

A HEAD START

UTA's Nursing Academy helps fast-track high school students' careers.

BY SAMUEL GALINDO

AGENT ILLUSTRATEUR

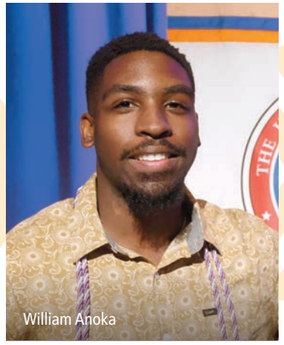
One of the pillars of the College of Nursing and Health Innovation's strategic plan is transformative education and clinical experience. There are many ways CONHI is advancing toward that goal, but one of the most effective is by providing tomorrow's health care professionals with access to a quality education as early as possible.

Throughout the past several years, The University of Texas at Arlington has partnered with the Keller Independent School District (ISD), Grand Prairie ISD, and the Islamic School of Irving (ISI) to establish Nursing Academy pathways for high school students. As early as ninth grade, students who meet admission requirements can begin simultaneously working toward their high school diplomas and Bachelor of Science in Nursing degrees.

"The Nursing Academy was created for exceptional high school students interested in pursuing a BSN degree at UTA," says Charles Johnson, director of recruitment for CONHI's enrollment and student services. "There's an opportunity to minimize the time in school to get your BSN."


Charles Johnson and Cynthia Koomey


Jeanean Boyd


William Anoka

Typically, a student will spend four years in high school, then four more years as an undergraduate working on their degree. One of the primary objectives of the Nursing Academy program is to shorten that timeline.

"What we found is that we can actually tailor and customize the program to make it six years or maybe even seven years total, making it more adaptable," Dr. Johnson adds.

Designed for Student Success

Early college high school programs are quite common, but CONHI's Nursing Academy is unique, as both University and high school administrators work together to tailor the experience specifically for students interested in pursuing nursing as a career.

Irvin Almazan, an ISI counselor, shares how they work with UTA to integrate the program curriculum into students' daily routines.

"For our nursing students, this roadmap includes core science requirements in junior year—like anatomy, physiology, and microbiology—intentionally aligned with UTA's nursing prerequisites," Almazan says. "By senior year, their schedules evolve into a hybrid format—split between Arabic, Quran, and Islamic studies at our ISI campus and on-site classes at UTA."

Jamie Ortega, lead counselor at the Keller Collegiate Academy, says the program provides students with a challenging yet rewarding opportunity.

"The UTA program offers a remarkable opportunity for students who are driven, highly self-motivated, and genuinely passionate about pursuing a career in nursing," she says. "UTA's reputation for excellence guarantees that students are receiving top-tier training and support."

Cynthia Koomey, a CONHI clinical assistant professor, believes the program is made for students who want to get a head start on their future.

"This gives students the ability to start toward that goal at a much younger age," Dr. Koomey says. "It puts them into the workforce much, much sooner."

Jeanean Boyd, former chair for undergraduate nursing and current clinical assistant professor, says the program maximizes students' productivity.

"The Nursing Academy is an efficient use of a student's time and resources to have an identified path for a career in nursing and health care," she says.

It also helps address complex health care challenges. For example, according to a study by the Texas Department of State Health Services, 15.6% of the projected demand for registered nurses in 2036 will not be met. Johnson believes programs like the Nursing Academy can help address the issue.

"The sky's the limit," he says. "We're going to be able to produce more successful nurses in a quicker fashion than the traditional route and therefore help address issues like the nursing shortage in Texas."

Supporting Academy Students

Simultaneously balancing the pursuit of a high school diploma and a college degree is undeniably challenging, but Nursing Academy students say it is worthwhile.

"If you're determined, it's 100% worth it," says Da'Naja Mosley, a Grand Prairie ISD and Nursing Academy student. "Earning a Bachelor of Science in Nursing by the age of 19 is a life-changing opportunity. It's a tough road, but also incredibly rewarding."


Da'Naja Mosley

As Mosley approaches graduation, she reflects on the positive impact UTA's faculty and staff had on her journey.

"What really made the difference for me was UTA," she says. "They provided the support we needed to transition from high school students to future nurses. The faculty, especially clinical instructors and BSN advisors, went out of their way to offer guidance and resources. Initiatives like the student success programs also show how dedicated CONHI is to its students' well-being and academic success."

William Anoka, a Grand Prairie ISD graduate and current Nursing Academy student, echoes this sentiment.

"The nursing program at UTA welcomed us with open arms," Anoka says. "I would highly encourage other students to participate in the Nursing Academy, especially if they have a general interest in health care. Nursing is a growing field and there are numerous areas that you can work in."

This past November, he began a research project on artificial intelligence (AI) as a method of optimizing emergency department triage. His study used various AI models to evaluate the presenting assessments of multiple situations and determine the appropriate level of care required. His research on such a relevant topic resonated with his colleagues, and he was invited to present at multiple events, including the UTA Honors Research Symposium and Sigma Theta Tau Induction Ceremony. He credits CONHI Clinical Associate Professor Thomas Dombrowsky for inspiring him to begin his research.

"Dr. Dombrowsky's nursing research course inspired me, as I studied different triage protocols in the United States, Denmark, the Netherlands, and Canada and compared them to evaluate which one produced better patient outcomes," Anoka says.

Planning for the Future

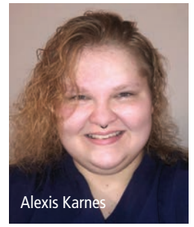
The three Nursing Academy partnerships in place are just the beginning. UTA has plans to continue expanding the portfolio of these programs—not only throughout DFW, but throughout Texas, where many rural areas currently lack access to quality health care.

"One of our goals is to be supportive of rural high schools and to help facilitate the dreams of their students to get into CONHI's nursing program," Johnson says. "Our vision is to expand our Nursing Academy to high schools in rural health areas."

This goal aligns with the initiative recently launched by CONHI's Center for Rural Health and Nursing to address education and access to health care in rural Texas communities.

The CONHI recruitment team visited more than 400 DFW high schools in the last year alone, Johnson says, with no signs of slowing down. With a goal to reach every DFW high school by 2026, the team believes the opportunities to expand the Nursing Academy program will only increase. For example, through the Maverick Allied Health Experience, UTA over the past two years has brought approximately 6,300 students to campus for in-depth tours of its state-of-the-art nursing facilities.

"We invite students to tour CONHI's Smart Hospital and kinesiology labs and to experience and learn more about our public health programs. They also meet with an academic advisor," says Johnson, who believes these tours can help lead to future partnerships—not only in nursing, but in all aspects of health care education.


Alexis Karnes

As the health care industry expands and adapts, UTA continually refines its approach to meet evolving needs. Each success story from current and former students further fuels the passion for a brighter future.

Alexis Karnes, who graduated from the Nursing Academy program in 2024, believes it provided her with an opportunity to pursue her dream.

"The Academy gave me opportunities that I wouldn't have received elsewhere. It allowed me to graduate with my BSN at 20 years old and start working my dream job as an emergency room nurse," says Karnes. "I have a world of possibilities ahead of me and so much time to explore them."

Shared dreams, bright future—that's the theme of President Cowley's 2030 strategic plan. And with the ongoing growth of CONHI's Nursing Academy pathways, students will have even more opportunities to achieve their dreams and contribute to a healthier, brighter future.

ADVANCING NEXT-GEN AGING

The Arlington Study of Healthy Aging will yield unprecedented information to help us age well.

BY MARGY ROCKWOOD

ASHA team member evaluating physical function and walking ability

In January 2025, a team of health scientists in the laboratories of The University of Texas at Arlington embarked on a project to comprehensively assess the health of 600 residents aged 50-85 in Tarrant County, Texas. The study data will unveil patterns and associations that may serve as both a roadmap for optimizing aging and fertile soil for spinoff studies to inform geriatric care.

The Arlington Study of Healthy Aging (ASHA) is the brainchild of cardiovascular imaging expert Michael Nelson, director of the Center for Healthy Living and Longevity. His multidisciplinary team is evaluating participants across a diverse matrix of physiological, morphological, and biochemical features.

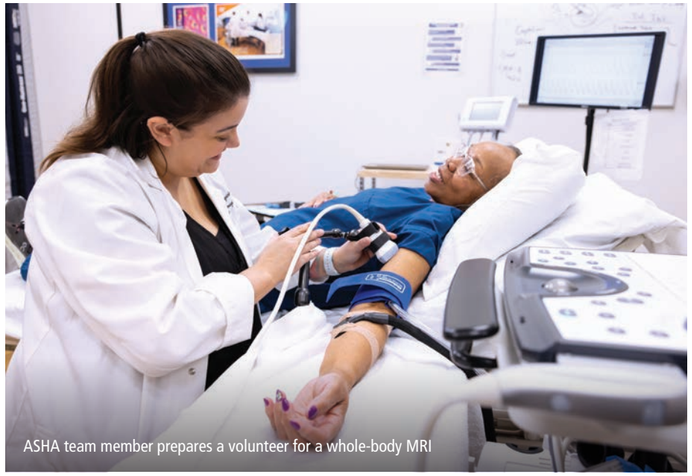
"There are many studies focused on aging, several of which have become common household names—such as the Framingham Heart Study and the Dallas Heart Study—and these have revealed much about heart health across the lifespan," Dr. Nelson says. "To my knowledge, though, no one has taken this kind of big picture, soup-to-nuts approach to assessing overall health."

While holistic medicine is as old as ancient China, this concept of recognizing and studying interconnectedness within the body has been a relatively recent trend in Western medical practice. For example, understanding the significance of the microbiome in studying heart disease and the relationship between leg muscle composition and heart failure exemplify the trend, Nelson says.

"We are particularly interested in the brain-heart connection. But there are also connections between the liver and heart, the brain and the skeletal muscle, body fat and inflammation," he adds. "Recognizing this, we have incorporated broad metabolic aspects of these as independent predictors of human health. Further, by understanding inter-organ connectedness and mechanisms of action, we can better define key factors associated with successful aging."

The goal, he says, is to work within the confines of each person's holistic health profile to develop therapies that are targeted to them and have broad implications for their overall health and longevity.

Paul J. Fadel, associate dean for research and a co-investigator on the study, notes that the age range for ASHA participants—which starts in late middle age—is one of its greatest strengths.



ASHA team member prepares a volunteer for a whole-body MRI

"When people are young, they're usually pretty healthy, but somewhere between ages 25 and 55 most people are developing some disease aspects," Dr. Fadel says. "Studies commonly look at people who are already older and compare them to young people. But by following people over the years, starting as young as 50, we can also discover when disease processes start to manifest, clues to interventions, and best timing of interventions."

For instance, when studies only look at elderly populations, they miss the hormonal changes women go through during menopause and the cardiovascular changes they experience post-menopause and with hormone replacement.

"It's valuable to track all these different decisions and their outcomes," Fadel says.

COMPREHENSIVE EVALUATIONS

Participants undergo two days of testing in laboratories across UTA's Science and Engineering Innovation and Research (SEIR) Building, with multi-modal imaging; blood, tissue, and genomic sampling; physical function and cognitive testing; and queries into their emotional and behavioral health.

Co-investigator Tracy Greer, the Nancy P. and John G. Penson Endowed Professor of Clinical Health Psychology, manages the neurocognitive health testing.

"Our group is performing comprehensive evaluations of neurocognitive function, which will help to identify early signs of cognitive decline. Combining this information with other aspects of physical and mental health has strong potential to promote a higher quality of life for our participants," says Dr. Greer, who is also associate chair of psychology.

Jon Weidanz, senior associate vice president for research and innovation, leads the multi-omics component of the study.

"Integrating genetic and multi-omics analysis into our investigation will further help to uncover complex biological mechanisms underlying aging," Dr. Weidanz says.

The resulting comprehensive phenotyping is expected to be a rich resource for faculty and students alike.

R. Matthew Brothers, associate chair of graduate programs in exercise science, is another co-investigator on the project.

"My lab studies physiologic mechanisms of blood vessel function and disease, which is why I am so excited about the wealth of information the Arlington Study of Healthy Aging will provide," Dr. Brothers says. "This study has something for everyone. It establishes an important foundation for investigators at UT Arlington to advance their own specific research programs, from heart health to brain health."

ADVANCED IMAGING

Imaging is an integral part of this evaluation. To capture granular data, the team is leveraging a new state-of-the-art 3-Tesla MRI housed in UTA's Clinical Imaging Research Center, also under Nelson's direction. This powerful tool enables sophisticated examination of every organ in the body, providing the investigative team with detailed information from head to toe.

"The major strength of the ASHA is its focus on connection across organ systems," says Crystal Cooper, assistant professor of psychology, who leads the neuroimaging component of the study.

"Other imaging modalities either aren't as versatile as MRI or they expose participants to ionizing radiation. What's great about MRI is we get really detailed information about the structure and function of nearly every organ non-invasively and without risk."

The net effect of such comprehensive imaging is reminiscent of the "medical tricorder" used by "Bones" McCoy on *Star Trek*—with a single pass over the patient, it collected everything needed for a medical diagnosis.

SPEEDY OR SLOW WALKER?

To assess physical function, the researchers study participants' gait and functional capacity through a six-minute walking test.

"How you walk says a lot about who you are and who you might become. It is known that the speed at which you walk is a strong predictor of Alzheimer's disease and related dementia," says Mark Ricard, kinesiology professor and the co-investigator who leads physical function testing. "What isn't known yet is why. Here, we have the ability to explore interrelationships between walking speed, muscle strength, and memory deficits, among other variables, on a much larger scale than has ever been done before."

The team is also taking their measurements beyond the laboratory, using remote monitoring devices to track participants' physical activity, sleep patterns, glucose control, and blood pressure.

"By unlocking the power of big data, we can gain a lot of really important information through monitoring our study participants in their natural environment," says Yue Liao, assistant professor of kinesiology and the co-investigator in charge of remote monitoring.

A HYPOTHESIS-FORMING DATA SET

Nelson calls the research "hypothesis-forming" versus "hypothesis-driven."

"Maybe a faculty member or student is doing research in blood pressure," he explains. "Now, they have access to a dataset with cardiac imaging, brain imaging, blood work, vascular data, and blood pressure values from 600 people. The observations and patterns generated will undoubtedly lead to new hypotheses, while saving our faculty and students time, energy, and resources."

Brothers adds that students and faculty can come to the study with their own questions, such as "Who is better able to maintain health as they age, and who is declining at a fast rate?" or "What is the relationship between social determinants of health, stress responses, and physiological responsiveness that correlate with neurological function?"

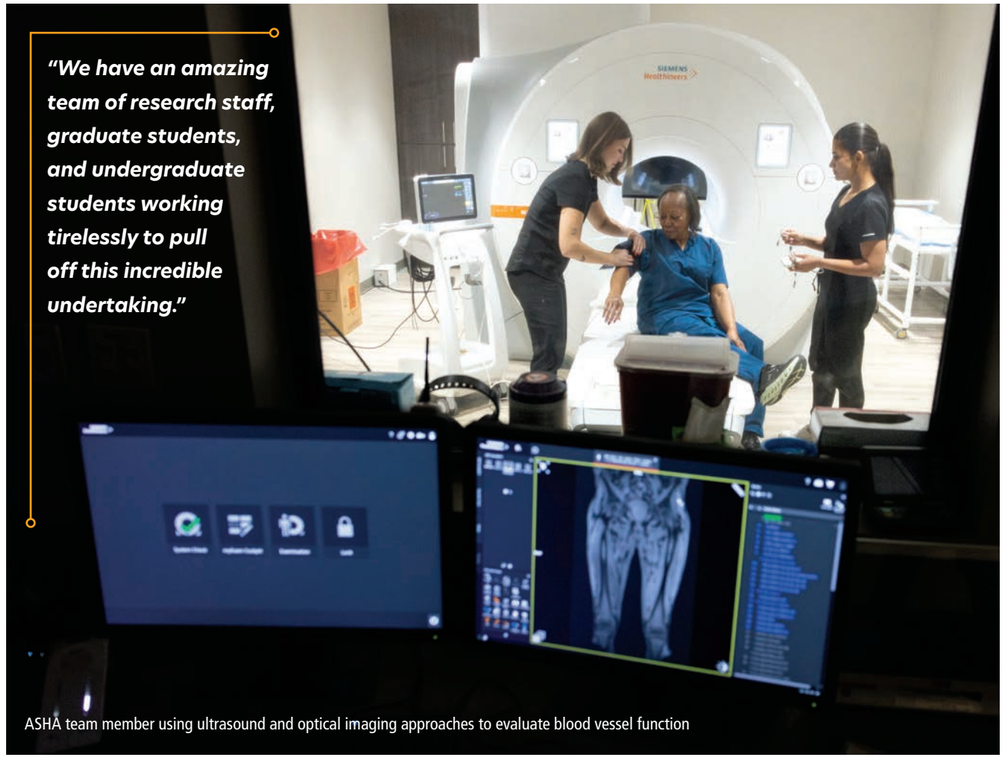
"The datasets will give the researchers a store of pilot data they can leverage for more studies," Fadel says. "It's going to open up a ton of great opportunities for our campus."

"We have an amazing team of research staff, graduate students, and undergraduate students working tirelessly to pull off this incredible undertaking," Nelson adds. "It truly takes a village, and our team has stepped up to the challenge."

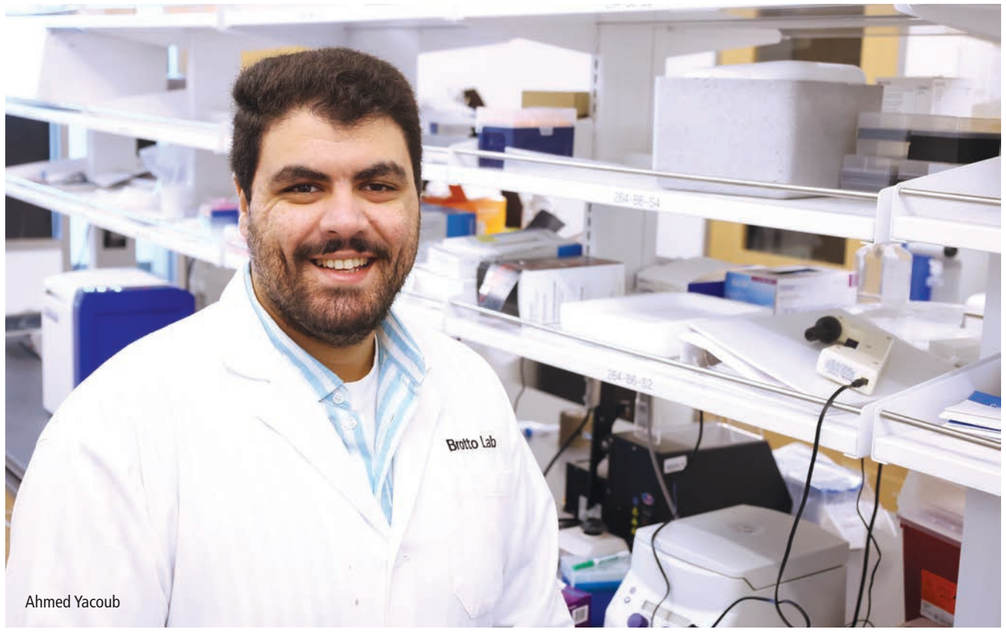
While the initial cross-sectional data the investigators are gathering promises to provide decades of discoveries and materials for future analyses, the researchers also plan to follow the participants' health over time and continue adding to the cohort over the years.

"My goal—and everyone's goal here—is that we will be able to continue this important work for decades to come," Nelson says. "Expanding this project to include follow-up visits five, 10, and 15 years from now is an important next step that will yield exponentially greater insights." ✚

"We have an amazing team of research staff, graduate students, and undergraduate students working tirelessly to pull off this incredible undertaking."



ASHA team member using ultrasound and optical imaging approaches to evaluate blood vessel function



Ahmed Yacoub

Yacoub Takes First Place Award for Best Presentation

Kinesiology student's research gives bone regeneration a "turbo boost"

Ahmed Yacoub, a PhD student in the Department of Kinesiology, received the first place award for best presentation by the American Association for Dental, Oral, and Craniofacial Research (AADOCR) National Student Research Group.

The competition took place in March 2025 in New York City during the 411 Rapid Research Competition—a part of the AADOCR/Canadian Association for Dental Research Annual Meeting and Exhibition.

Yacoub competed against six other finalists as he presented an abbreviated version of his presentation, titled "Semiconductor Dielectric Coatings on Cranial Implants Boost Osteogenesis and Rapid Bone Apposition." The presentation reflects the focus of his research in the UTA Bone-Muscle Research Center and Associate Professor Venu Varanasi's Musculoskeletal Nanobiomaterials Laboratory.

"My research centers on improving bone implants using semiconductor dielectric coatings to enhance bone regeneration," Yacoub says. "It's like giving bone regeneration a turbo boost. By using these semiconductor materials, we create a surface that encourages rapid cell attachment and growth, leading to stronger and faster bone formation."

Yacoub, who holds a master's degree in pharmaceutical technology from Cairo University in Egypt, accomplished a rare feat just by being nominated as an award finalist.

"This recognition is rare for a pharmacy graduate in a field focused on dentistry and maxillofacial research," Yacoub says. "It highlights the impact of our work and the interdisciplinary nature of scientific innovation."

Dr. Varanasi, who has served as Yacoub's mentor during his time at UTA, shared his enthusiasm for his student's award.

"Mr. Yacoub is training to be a clinician scientist, and it is great to see him being selected for such a prestigious award," Varanasi says. "The reason why it is especially rewarding for me is that my principal charter as an engineer and scientist is to train our future clinician scientist leaders; he is an example of how we can do this at an early stage in one's career."

Yacoub believes his overall experience at UTA has helped him achieve success in his field of study.

"My time at UTA has provided me with an exceptional research environment to develop my skills and expand my scientific knowledge," he says. "The support I've received here has undoubtedly opened doors to opportunities like this award."

Alumnus Credits Student Organization for Continued Success

Experience as HSNA president taught him valuable leadership skills


Orlando Flores

Orlando Flores, a UTA alumnus and former president of the campus Hispanic Student Nurses Association (HSNA), believes his decision to join a student organization helped pave the way for his future success.

Flores' rise in the HSNA from volunteer chair to president came with increased responsibilities and new opportunities to learn crucial leadership skills.

"My experience serving in the HSNA was invaluable in preparing me for leadership after graduation. It allowed me to hone key professional skills," Flores says. "Additionally, I built a strong network of connections in the health care field, which has proven essential."

While the experience serving in the HSNA was important for his career, it made an even greater impact on him personally.

"My overall experience while serving in HSNA was both meaningful and transformative," Flores says. "From the very beginning, HSNA provided a safe, culturally rich environment where students with shared values and interests could come together to celebrate, connect, and give back to the community."

While balancing school and his leadership roles in the HSNA, Flores also joined the National Association of Hispanic Nurses' (NAHN) Dallas Chapter in 2018; by 2022, he was president. He credits his time in the HSNA for preparing him for the role.

"When transitioning into my leadership role with the NAHN Dallas Chapter, the shift felt seamless," he says. "The skills I developed through HSNA translated into my leadership responsibilities within NAHN, making the process feel like a natural progression."

Flores encourages UTA students to consider joining a UTA organization, as he himself continues to benefit from the decision he made to join one years ago.

"I strongly believe that joining UTA organizations is incredibly beneficial for students. It's important to find a community that shares your interests and offers support throughout your academic journey," Flores says. "For me, I was fortunate to discover HSNA, where I felt an immediate connection. Joining an organization is an investment in your future career—what you put into it is what you'll get out of it."

Amanda Berney

Honors Student Wins Top Prize at Conference

Berney's research highlights the importance of holistic health care for patients and their families

Amanda Berney, a recent nursing and Honors College graduate, shared a presentation that received the Top Poster award at the American Association of Neuroscience Nurses' annual conference in New Orleans this past March, when she was still a student. The presentation, which was a collaborative effort with Denelle Hebert, a neuro ICU nurse and educator at UT Southwestern, was titled "A Blank Slate: A Nursing Student's Journey into Neuroscience Nursing."

The presentation was a product of the unique research Berney conducted as an intern in the UT Southwestern Engaged Nursing Students Partnering in the Research Experience (ENSPIRE) program, which highlighted the importance of holistic health care for patients and their families.

"By exploring virtual reality as an orientation method, we found it demonstrated acceptability and feasibility," says Berney. "We were also able to provide some information about post-ICU syndrome in families in the manuscript, currently under review for possible publication with the *Journal of Nursing Research*."

Berney graduated this past spring and is now completing a labor and delivery nurse residency. She believes that her experience at UTA helped prepare her for success.

"My time at UTA taught me that anyone can be a leader by taking initiative in patient care," she says.

Maxine Adegbola, a UTA associate clinical professor and Honors College coordinator, believes Berney's success is a result of her hard work and positive attitude.

"Amanda has been an exceptional student—eager to learn, enthusiastic, and always seeking new opportunities to grow. Her academic success is matched by her positive spirit," Dr. Adegbola says. "Her award is a reflection not only of her hard work, but also of her ability to bridge the gap between student and professional with grace and vision."

Berney looks back at the conference with gratitude because it gave her the opportunity to not only present, but also to learn.

"It was eye-opening to hear from various speakers at the conference and learn new things there, such as how music can be used in rehabilitation, how to identify the vasculature of the brain, and the history and ethics of brain death," Berney says. "Overall, I'm thankful for the UTA Honors College's generosity in making this experience possible."

American Physiological Society Grants Fuel Student's Research

Ken Perry's award-winning research focuses on the effects of high-fat meals on heart health

Recent UTA alumnus Ken Perry has always been interested in how the heart works. This curiosity led the Arlington High School graduate to start working in the lab of kinesiology Professor R. Matthew Brothers during his second year of college. Just a couple years later, he had already received two awards from the American Physiological Society (APS) for his research on a connection between high-fat meals and cardiovascular health.

Perry first came to work with Dr. Brothers, a renowned investigator with many federally funded research projects on cardiovascular disease, through UTA's Summer Undergraduate Research Program in Integrative Physiology (SURPINT) program.

"I always wanted to learn about heart and blood flow, so when a friend of mine interested in research encouraged me to apply for the SURPINT program, I did," Perry says.

During the program, students spend 10 weeks working alongside established faculty mentors, gaining first-hand experience working in a laboratory. Perry continued his work through the Undergraduate Research Opportunity Program (UROP), where students earn a stipend working in a lab conducting supervised research.

"I loved the vascular research using sonography, and Dr. Brothers encouraged me to apply for the UROP program, where I could get paid to work in his lab," Perry says.

While there, Perry started analyzing data collected from previous research studies. He noticed a correlation between the consumption of high-fat meals and changes in brain blood flow.

"Acutely, those high-fat meals were shown to increase stiffness, called pulsatility, which worsens the body's ability to accommodate high-pressure flow. Over the long term, those stiffer arteries permit higher flow from physical exertion or stress to reach capillaries, inducing damage to brain blood vessels," Perry says.

"The increased friction of blood flow on the capillaries is like rubbing something on thin skin. Over time, the skin will degrade, and you'll have an open wound," he adds. "It's similar in the brain—the more you expose the capillaries to high-pressure flow, the higher the risk the capillaries in the brain will become damaged."

With encouragement from Brothers and colleagues in his lab, Perry submitted his research to APS, a nonprofit dedicated to advancing the understanding of life and health, and he won two awards: the Barbara A. Horwitz and John M. Horowitz Undergraduate Research Award and the Barbara A. Horwitz and John M. Horowitz Outstanding Undergraduate Research Abstract Award.

"The first award was given to about 100 people, but the second was more of a competition meant to honor the top 10 undergraduates at the entire APS meeting, which had over 20,000 people," Perry says. "It is really a huge honor for me."

"It's always a pleasure to work with the next generation of research scientists, and Ken has proven to be an outstanding researcher who has helped make real contributions in our research on cardiovascular health," says Brothers, who is also associate chair of the Department of Kinesiology. "He has played a key role in our team these past few years, helping us collect and analyze data on how changes in blood flow and blood vessel health affect the heart and brain, especially in at-risk populations."

Ken Perry

After graduating from UTA this past spring, Perry is taking a year off before applying to graduate school for 2026. He hopes to eventually attend medical school.

"I love how innovative and encouraging UTA is," Perry says. "I'm really grateful to Dr. Brothers for all his mentorship. I've really loved being able to take advantage of all the opportunities here."

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