

UTA

**The University
of Texas
at Arlington**
Magazine
FALL 2018

Creative Journeys

*Alumnus Francisco Moreno explores
his identity through physical
travel and inner exploration. PAGE 21*



COVER PHOTOGRAPH BY KEVIN TODORA, COURTESY OF THE ARTIST AND ERIN CULLEY GALLERY, DALLAS. PHOTOGRAPH BY EDUARD BENSE

**HARVEY
CLEANUP**

In the
aftermath
of the storm,
there was still
much work to
be done.
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The Explainer

Pillars of Support

In this issue, use the key below to see which stories correspond to the pillars of UTA's Strategic Plan.

Sustainable
Urban
Communities



110
001
101

Data-
Driven
Discovery

Global
Environmental
Impact



110
001
101

Health and
the Human
Condition

Contents

FALL 2018
VOL. XLII

SPECIAL FEATURE

THIS IS UTA

UTA is a model 21st-century urban research university, but what does that mean? **30** We set a standard for other universities to follow. **32** We help solve the problems of our bustling urban region. **38** We clear pathways to higher education for all students, educating tomorrow's workforce. **44** We put our research into action, helping ease the effects of a devastating storm. **50** We take a proactive approach to addressing a growing problem affecting our state and beyond.



HELLO MAVERICKS! I am thrilled to join the UTA team as the vice president of the newly formed Division of Institutional Advancement. This configuration, a melding of the departments of University Communications and Development and Alumni Relations, signifies yet another milestone in the University's immense growth and change. Our work will further position UTA as we set our sights firmly on the future growth and excellence of the University and Maverick leaders in the state, nation, and world.

Together, we will focus on furthering public understanding and recognition of UTA and its mission as a leading public research university. Equally important, we will continue to support and build strong relationships with our entire community, including students, alumni, community members, donors, media, parents, and friends.

President Karbhari's vision for UTA to become the model 21st-century urban research university, coupled with the enthusiastic support that faculty, alumni, donors, and staff have for that vision, made it an easy choice to join this team. The opportunity to work together to share UTA's story with the world and help the institution achieve its aspirational goals is personally and professionally inspiring.



SPREADING THE WORD: MAVERICKS ARE AWESOME

In the following pages, you will read about just some of the reasons why UTA is a model 21st-century urban research university. Our students are among the highest achievers. Our faculty continues to conduct important research that is solving today's problems and anticipating and addressing future challenges in our local, state, and global communities. Our alumni are committed Mavericks who are thriving in their professions and continuing to give back to their alma mater.

Together, these stories paint a clear picture: UTA is a university of excellence with a dynamic community that is singularly focused on making an impact, and it is time for the whole world to know who we are!

Go Mavericks!

—Deborah “Dee” Robinson, PhD
Vice President of Institutional Advancement



An exemplary fundraiser and advancement professional, Dee Robinson brings more than 25 years of leadership and management experience through previous executive positions at major universities.



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EXCELLENCE AT A GLANCE

UTA is garnering accolades at a record pace. Here are just a few of the latest. To catch up with all of the University's recent accomplishments, visit uta.edu/rankings.

UTA conferred **6,103** degrees in spring 2018, the largest in University history.



For providing high social mobility and impactful research, UTA is ranked as one of the **top 25 “leader” universities** in the nation by the Brookings Institution.

UTA is the **largest producer** of baccalaureate-degreed nurses in Texas.

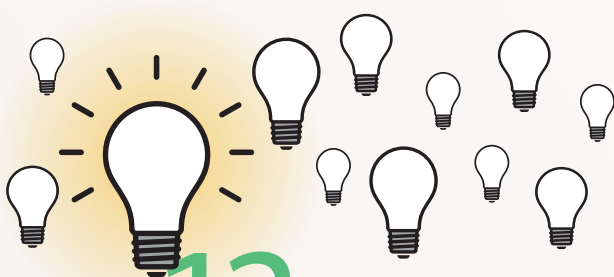


U.S. News & World Report's 2018 “Best Graduate Schools” rankings include more than 20 UTA graduate programs.



UTA jumped **16 spots nationally** (to 150) in the 2018-19 Center for World University Rankings.

UTA was granted **23** U.S. patents in 2017, contributing to **UT System's No. 3 world ranking.**



With **12** fellows of the National Academy of Inventors, UTA has **the most in Texas** and is in the top 10 in the nation.



Updates from
the Mavericks
who shape
the UTA
community
near and far

Mav Roundup

FINALS CAN BE RUFF, so each semester, we bring out some furry stress-relief experts to help. These little study buddies are trained therapy dogs that visit the basement of the Central Library for a few days during finals week. Students can take a paw from the books and soak up some puppy love before getting back to the business of acing their final tests of the semester.

Postcard

Following Mavericks as they travel the world



New Delhi, India

WHO: Kateleen Collins, 2017 nursing graduate

HOW: Through a School for International Training course, "Traditional Medicine and Health Care Practices," which offered an exploration of lifestyles throughout Northern India.

WHY: "I had a personal interest in different perspectives of medicine and wanted to see how a

spectrum of communities from urban cities to rural mountain regions incorporated health into their daily lifestyles. My goal was to learn about alternative lifestyles and broaden my definition of what it means to be healthy and how to achieve optimal health."

LESSONS SHE TOOK BACK HOME: "When health is assessed from an all-encompassing perspec-

tive, it can lead to better individual health, as this individualized approach makes health maintenance a more practical part of everyday life. On a broader note, I learned that we are a very small part of a big, beautiful world, and we have so much to learn about ourselves and the world when we learn from people who live different lifestyles."



POINTS OF EXCELLENCE

UTA is No. 1 in Texas for veterans (Military Times).

MAV ROUNDUP



BEST FOR VETS

SERVING OUR SERVICE MEMBERS

Veterans services evolve to meet student needs

Over the next six years, according to estimates from the Student Veterans of America, the United States will see a 2 to 5 percent increase in veterans leaving the service to pursue higher education. Currently, UTA has between 4,000 to 5,000 military-connected students—nearly 10 percent of UTA's total student population—taking courses at any given time.

"While fully capable and qualified, our student-veterans face unique challenges," says James Kumm, executive director for Veteran Programs. Kumm is a combat veteran of the U.S. Army and a seasoned higher education administrator. "With such a large military-connected student population, UTA remains committed to welcoming and honoring military-connected families while providing resources to ensure their academic and career development success."

Part of that readiness includes the creation of Kumm's position, which was designed to coordinate and streamline veterans services; provide focus, vision, and leadership; and serve as a central point of contact for UTA's student-veterans, faculty, staff, and the local community. Over the past year, Kumm has conducted

an extensive evaluation of UTA's veterans services and taken leadership of the Veterans Connection Committee, which explores and finds solutions for issues concerning student-veterans.

One of the immediate concerns the committee identified was the need for a centralized location for all UTA veteran-exclusive services. Action quickly followed, and work is underway to create a veterans service facility, a first-stop shop on campus for student-veterans. The grand opening is scheduled for spring 2019. In addition to housing all student-veteran services, the facility will include flex office space for visiting groups, a lounge and kitchen for studying and relaxing between classes, a small classroom for tutoring, and programming geared toward student-veteran integration, involvement, and academic and professional success.

"Our student-veterans continue to make sacrifices for our country. It is an honor to assist them when they choose to better themselves through higher education," Kumm says. "Veteran Programs is proud to be part of a university that believes it isn't enough to be simply veteran friendly—we must be veteran ready."

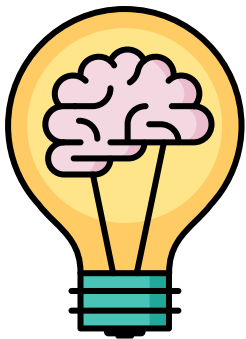
FROM VETERAN TO STUDENT

UTA employs a three-tiered approach to veterans services

TRANSITION
Helping student-veterans become familiar with the University and learn how to function outside of the military.

INTEGRATION
Assisting student-veterans in adapting to civilian life and supporting their personal and academic success.

WORKFORCE READINESS
Guiding student-veterans through the Lockheed Martin Career Development Center to understand how to use and convey their military experience to potential employers and connect them with employment opportunities.



ACADEMIA UNPACKED

FANTASTIC FELLOWS

Why graduate research fellowships matter

A university’s success in innovation, science, and technology can be measured by the grants it receives. One prestigious recognition is the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) award.

The GRFP helps ensure science and engineering in the U.S. remain vital. The program recognizes and supports outstanding students in NSF-supported disciplines who are pursuing research-based graduate degrees at accredited universities. Past fellows have included Nobel Prize winners, Google founder Sergey Brin, and many others.

In the last five years, nine students at UTA have received this recognition, including Omomayowa Olawoyin, featured on the opposite page, and Marquerrite Herzog, featured on page 17. Other recipients include Troy Barber (’16 MS), Kathleen Currie (genomics student), Lauren Fuess (’18 PhD), Laura Henderson (’14 PhD), Sarah Hussein (aeronautical and aerospace engineering student), Kimberly Johnson (’16 MA), and Danielle Rivera (evolutionary biology student).

“Receiving this fellowship made me pause and think about how far I have come academically,” Olawoyin says. “It also made me think about the responsibility that I have to make outstanding research contributions to my field of study.”



THE AWARD GOES TO

Alumna wins prestigious “Oscars of Teaching”

They call the Milken Educator Awards the “Oscars of Teaching,” but the comparison only works if the nominees in any Oscars category exceed 300,000. In late 2017, those were the odds that Jennifer Fuller (’03 MEd, Teaching), an educator in the Arlington Independent School District, beat when she was named a Milken Educator. Of the 300,000-plus working public school teachers in Texas that year, Fuller was one of only two to receive the honor.

The Milken award, which recognizes teaching excellence, comes with a \$25,000 prize. Since the program came to the state 18 years ago, only 50 teachers have received recognition. Two UTA graduates

have previously won Milken awards. “The English and education classes I took at UTA have been instrumental in shaping the instructional strategies I now use with my classes,” Fuller says. “Three of our Arlington Collegiate High School seniors are actually taking an education class at UTA right now, and I am excited to see them develop into incredible educators one day.”

The Milken program was started in 1987 by the Milken Family Foundation to reward outstanding teachers for their tireless efforts to educate countless generations. Since its founding, the program has awarded more than \$68 million to individuals across the country.



Talk



Omomayowa Olawoyin
PhD student,
Mathematics

You earned your bachelor’s degree in mathematics from UTA a few years ago. What first brought you to UTA? Having lived a majority of my life in Arlington, I must admit that UTA was not on my radar for undergraduate studies. However, after touring the campus, I began to see the University as a jewel in my own backyard. The school had so much to offer, especially in terms of scholarships. I received a full ride to UTA, including housing, through the Richard Greene Scholarship. That played a major role in me choosing UTA.

Why did you come back for your PhD? I wanted to attain the highest degree in whatever I decided to study so that I could have the option of working anywhere without having doors closed to me because I didn’t have a certain degree. I specifically decided to come back to UTA because I was convinced that it was exactly where I needed to be to grow academically, professionally, and spiritually. The University is experiencing a season of growth, and I am

excited to be here during this time. By the way, congratulations on your National Science Foundation graduate fellowship! Receiving the NSF Graduate Research Fellowship Program award was such a blessing. It increased my motivation to do research and confirmed that I had something important to contribute to the scientific community.

Can you tell us more about your research experiences at UTA? My first research experience was through the UTTER [Undergraduate Training in Theoretical and Ecology Research] program. I thoroughly enjoyed UTTER because it opened my eyes to the versatility of mathematics. I also got the chance to present my research at numerous conferences, which polished my presentation skills. I also conducted research in mathematics education through the McNair Scholars Program, investigating how teacher reactions to pivotal moments in

instruction impacted the level of student discourse in elementary school mathematics classrooms. As a graduate student, I’m doing research in mathematical biology and am developing mathematical models to describe the spread of diseases such as Zika. To achieve what you have requires drive and determination. From where do you get those qualities? A lot of my drive comes from remembering my past and where I came from. My parents sacrificed quite a bit to bring me and my siblings from Nigeria to America in hopes of providing us with a better education. Their sacrifices motivate me to seek out and make the most of my educational opportunities.



Collected

Stamatios Gus Alexander Sr. Sword Collection, Department of Military Science

A GRADUATE OF North Texas Agricultural College, Stamatios Gus Alexander Sr. was commissioned in the Army Air Corps. There, he commanded the sister squadron of actor Jimmy Stewart. In 1983, Alexander established a special legacy at UTA: He donated part of his extensive collection of old military swords and sabers—13 in total—to the Department of Military Science. The oldest, a U.S. artillery officer's saber, is dated circa 1805-20. Among the newest is a cavalry officer's saber, circa 1871-1902.



U.S. staff and field officer's sword, circa 1860-65.



An infantry officer's sword from 1850.

POINTS OF EXCELLENCE

Since 2015, UTA's brain research team has brought in over \$6 million in funding.

MAV ROUNDUP



1981 DATA-DRIVEN

ALUMNA RUNS THE NUMBERS

UTA CFO honored for excellence

The *Dallas Business Journal* named Kelly Davis ('84 BBA, Accounting), chief financial officer at UTA, the 2017 CFO of the Year in the large companies/not-for-profit category.

Paying the bills is a thankless job, but the UTA community recognizes the special talent it takes to run a tight financial ship. That's because Davis does it so well.

"Despite a reduction in state funding for the next biennium, UTA is continuing its trajectory without slowing down or increasing its debt service ratio, due to Davis' expertise and foresight," says President Vistas Karbhari. "She has developed with great dexterity the structures and processes to enable record-setting growth in four distinct areas simultaneously—a growth in on-campus population, one of the largest online student bodies at any public research university in the nation, rapidly expanding research expenditures, and significant new construction."

Davis has worked at the University for more than 20 years, starting as assistant director of accounting services and advancing to her current position as CFO and vice president. In addition to these roles, she also oversees University Analytics, the Office of Information Technology, and the Information Security Office.



TBI TBD

UNCOVERING BRAIN TRAUMA

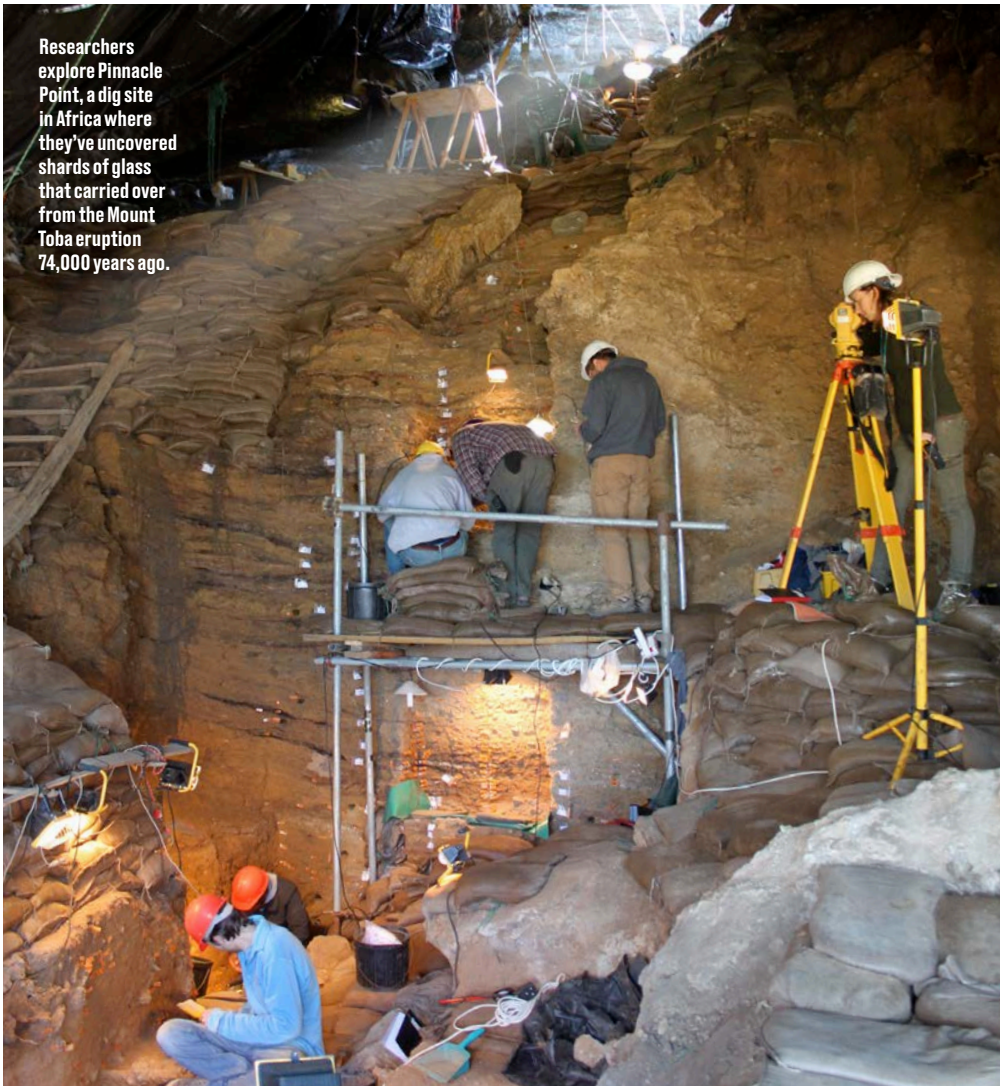
Researchers take a closer look at blast-induced brain damage

Ashfaq Adnan, associate professor of mechanical engineering, and his postdoctoral associate Yuan Ting Wu published research on traumatic brain injury in *Nature's Scientific Reports*. Their work revealed that battlefield blasts may cause cavitation (tiny bubbles) in the brain's perineuronal nets, which may collapse and cause neuronal damage.

Drs. Adnan and Wu studied the phenomenon through a simulated shock wave-induced cavitation collapse within the perineuronal net, which is a specialized extracellular matrix that stabilizes synapses in the brain. Their results show that the forces created by

an asymmetrical bubble collapse may break the hyaluronan, the perineuronal net's main structural component. The findings improve current understanding of the connection between damage to the perineuronal net and neurodegenerative disorders.

"Dr. Adnan's findings offer important insight into how the brain is affected in combat scenarios," says Duane Dimos, vice president for research. "Understanding the effects of blast injuries on the brain and knowing that cavitation occurs is an important step toward finding better ways to prevent traumatic brain injuries on the battlefield."



BEYOND SURVIVAL

Researcher shows humans thrived through volcanic winter

When Mount Toba in Indonesia erupted some 74,000 years ago, resulting in a decade-long volcanic winter, humans didn't just survive—they thrived.

That's what Naomi Cleghorn, associate professor of sociology and anthropology, and a team of researchers discovered when they looked at two sites along the southern coast of South Africa: Pinnacle Point, where people lived, and an open-air site nine kilometers away, where they collected stone and processed it for future tool manufacturing.

The team's research, which was published in a *Nature* paper, centered on glass shards that traveled nearly 9,000 kilometers from Toba to Pinnacle Point.

"We have demonstrated that in [these sites] that may have housed the origin population for all modern humans, our ancestors thrived through this volcanic event,"

Dr. Cleghorn says. "This may have been the combined result of the uniquely rich resource base of the region and a highly resilient adaptation—a hunting and gathering economy wielded by a modern human with an advanced cognition and high level of cooperation."

Now that the two sites have been identified, the research is extending to other sites, including Cleghorn's current dig, Knysna. Through her work at Knysna and Pinnacle Point, Cleghorn aims to develop a high-resolution chronology of human evolution and social adaptation during that time.

"Naomi Cleghorn's work is foundational to paleosciences," says Elisabeth Cawthon, dean of the College of Liberal Arts. "It is also cross-disciplinary work, linking UTA's strategic themes of global environmental impact and sustainable urban communities."



Chat



with **Randy Gideon**
(’75 BS,
Architecture)
Architect

THE REVITALIZATION OF a major metropolitan area takes commitment to a strategic plan and a keen sense of purpose. Randy Gideon is well aware of this and has applied his knowledge and skills to help Fort Worth experience a renaissance of sorts.

After starting his career in the Mediterranean region, Gideon wanted to turn his attention to local civic projects. In the late '80s and early '90s, Gideon helped develop several master plans to attract businesses and residents to downtown Fort Worth. He was also influential in several key projects in Fort Worth, including the Police and Firefighters Memorial in Trinity Park and the Intermodal Transportation Center. All of Gideon's work has strategically elevated Fort Worth's reputation as a remarkable place to live, work, and study.

It all began with a love for drawing. "Early on, I came to appreciate the art of drawing, and I still hand draw plans and renderings," he says. "The process and patience it takes to create a drawing that captures the subtleties of real life is something that I have always admired and respected."

The meticulous attention to detail that makes an exceptional drawing also helped Gideon begin to understand the intricacies of city zoning. It's part of the reason his career evolved from architecture to include urban planning.

Throughout this evolution, he developed a guiding principle to always give back to the community.

"I believe that a city's reputation is as strong as the integrity of its citizens, and [my business partner and I] wanted to give back so much that we had to watch our bottom line closely," he says. "I felt like it was our duty to give back whenever possible to make our community better."

Gideon has made a difference in Fort Worth, and he gives a portion of the credit to UTA.

"My architectural education at UTA was phenomenal," he says. "It set the foundation for my professional career."

Scene



Field Research: Manhole Corrosion Arlington, Texas

WE DON'T OFTEN think about the vast infrastructure beneath our feet that provides our water—at least, not until something goes wrong. If civil engineering Associate Professor Melanie Sattler has her way, you won't ever need to think about it at all.

Dr. Sattler, who is also the **Syed Qasim Endowed Professor of Civil Engineering**, leads a team of researchers including Victoria Chen, professor in the Department of Industrial, Manufacturing, and Systems Engineering, and Arpita Bhatt, civil engineering adjunct professor. They are a year into their three-year, \$474,723 contract from the city of Arlington to inspect 350 concrete manhole shafts for corrosion and develop a method to prioritize which manholes need protection the most. The data collected will be used to help the city prioritize protection of more than 19,000 manholes.

Dr. Sattler's students assist in collecting data. From left: Ketan Shah, a graduate student, and Pablo Choquis Rosales, an undergraduate student, both from civil engineering.



RECORD MAKERS

In addition to inspecting for possible corrosion, the team uses sensors to measure hydrogen sulfide, gas-phase relative humidity, and more.



SIZED UP

Each manhole is 4 to 5 feet in diameter and, in Arlington, can range from 4 to 45 feet tall.

DRAIN PAIN

Microbes in the sewer convert the hydrogen sulfide gas to sulfuric acid, which then corrodes the concrete. Sulfuric acid also corrodes the pipes adjacent to the manhole.

WATER THREAT

Corrosion of manhole shafts can threaten the integrity of sanitary sewer mains and allow rain and other runoff from the surface to enter the wastewater system.

EXPLORE

Take a deep dive into Dr. Sattler's research via an immersive 360-degree video experience. uta.edu/mag/scene

Crash Course



MUSI 3396 Record Label and Studio Management

MAVERICK MUSIC-MAKERS now have an outlet to explore the business side of the industry through the Department of Music's new Record Label and Studio Management course. In this class, students help run UTA's two record labels and manage every aspect of UTA's recording studio.

"Record label management allows students to learn, develop, and participate in an active music industry environment," says Jamar Jones, adjunct professor of music industry studies and instructor of the course. "The key is that they will walk away with real-world experience that could be valuable in the job market."

UTA's labels are UTA Records, which releases faculty members' music, and UTA Records X, which is geared toward student-driven releases. UTA has re-

leased two albums on UTA Records, and the first release from UTA Records X is in the works. Money earned from the releases is put back into the labels.

"This course is a unique and cutting-edge experience for students," says Dan Cavanagh, interim chair of the Department of Music. "The recording industry is in such transition now that students are actively participating in charting a course into the future for recorded music."

Left to right:
Micah Hayes, senior
lecturer, guides
Sheridon Cluse, se-
nior business major,
at the controls. E.J.
Calderon, junior
music media major,
strums his guitar.



EXPLORE

You can find the first two releases from UTA Records—In the Loop by WoodWired Duo and 20 Years by Cavanagh and Dave Hagedorn—on iTunes. You can also listen to a student's track at uta.edu/mag.

POINTS OF
EXCELLENCE

UTA hired 150 new faculty over the last three years.

MAV ROUNDUP



GENOME HOME

HEALTH IN SEQUENCE

New genome center advances health and the human condition

This spring, UTA, in partnership with the University of North Texas Health Science Center (UNTHSC), ushered in a new era of life and health science discovery in Texas with the opening of the North Texas Genome Center (NTGC). Housed in the new Science & Engineering Innovation & Research building, the NTGC provides massive DNA sequencing capability for regional biotech and medical research.

"The opening of this center is wonderful news for Tarrant County and will bring a real boost to our local economy," says Arlington mayor Jeff Williams. "By bringing together UTA's science, engineering, and nursing expertise with the biomedical research experience of UNTHSC, this center will be able to produce innovative health care solutions with a real positive impact on patients."

The NTGC has already sequenced over 100 genomes. Researchers have taken steps to identify rare genetic variants underlying human diseases, identified genes and patterns of gene expression that may cause brain and nerve regeneration, and identified a link between ethnicity-specific expression of regulatory genes that may be important for personalized cancer treatment.

Integral to the NTGC's work is developing partnerships with industry leaders to advance a unified mission of delivering genomics-based tools to local communities. So far, this has included working with researchers from institutions like UT Southwestern, the University of North Texas, Texas A&M University, and Illumina (the world leader in genome sequencing technology) and partnering with organizations such as Cook Children's, Scottish Rite Hospital, and UNTHSC.

"Going forward, we will develop the NTGC as a hub to connect academic research with clinical medicine to catalyze discovery, innovative treatment, and personalized medicine that is relevant regionally and globally," says Jon Weidanz, founding director of the center. "Our work could break down barriers to personalized and precision medicine related to the acquisition and analysis of big data genomics."

ADVANCING KNOWLEDGE

Marquerite Herzog, a biology doctoral student at UTA, was awarded a prestigious National Science Foundation Graduate Research Fellowship to study the molecular genetic basis of changes in behavior seen when an individual loses during an aggressive conflict. For her research, Herzog plans to extract and sequence the RNA of beetles that lose fights and compare it to beetles that have not fought, using an Illumina sequencing platform from the NTGC. "The

North Texas Genome Center's high-quality sequencing equipment will allow me to identify the genes and the proteins associated with the 'loser' effect and recovery," she says. "By studying these genetic components of behavior, I will be able to provide answers not only for the biological sciences, but also potentially for other disciplines such as psychology, sociology, environmental science, resource management, and education."



Well Read

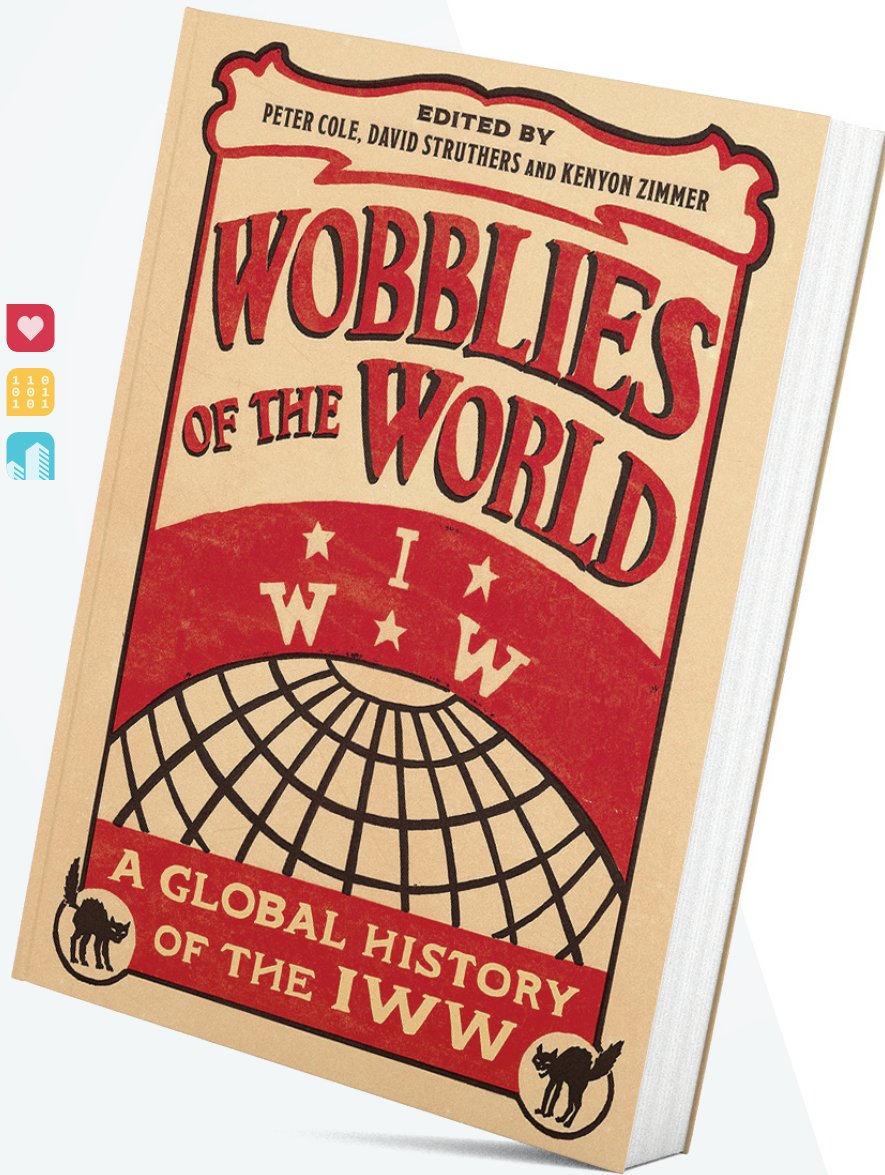


Fascinating books by Maverick authors to fill your library

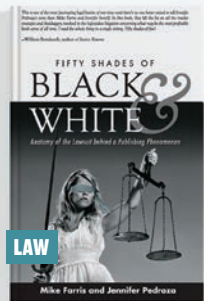
Wobblies of the World: A Global History of the IWW

CO-EDITED BY KENYON ZIMMER, ASSOCIATE PROFESSOR, DEPARTMENT OF HISTORY

In *Wobblies of the World*, Kenyon Zimmer, Peter Cole, and David Struthers take a close look at Chicago's Industrial Workers of the World, a union founded in 1905 that was united by evolutionary and internationalist philosophy and tactics.



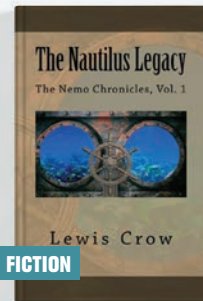
Apple Black
BY ODUNZE OGUGUO ('14 BFA, '18 MFA, FINE ARTS)
Odunze Oguguo's Apple Black series follows Sano, a young sorcerer raised and trained to be the world's savior. Ridding Eden of evil will require Sano to learn the secrets behind his father's research on reviving the effects of an ancient fruit that turned humans into sorcerers.



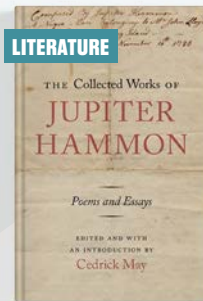
Fifty Shades of Black & White: Anatomy of the Lawsuit Behind a Publishing Phenomenon
BY MIKE FARRIS ('77 BA, POLITICAL SCIENCE) AND JENNIFER PEDROZA
Mike Farris and Jennifer Pedroza tell the story of the last lawsuit Farris handled before retiring. It involves Fifty Shades of Grey and its international partnership agreements, shady global non-competes, and much more.



Home- and Community-Based Services for Older Adults
BY NOELLE L. FIELDS, ASSISTANT PROFESSOR, SOCIAL WORK, AND HER CO-AUTHORS
In their examination of home- and community-based services for older adults, Noelle Fields, Keith Anderson, and Holly Dabelko-Schoeny explore the history, theory, research, policy, and practices across care settings.



The Nautilus Legacy
BY LEWIS CROW ('87 BA, COMMUNICATION)
A family destroyed. A secret discovered. A destiny chosen. In *The Nautilus Legacy*, Lewis Crow uses the worlds created in 20,000 Leagues Under the Sea and *The Mysterious Island* to create an original new installment to some of Jules Verne's most enduring works.



The Collected Works of Jupiter Hammon
EDITED BY CEDRICK MAY, ASSISTANT PROFESSOR, ART AND ART HISTORY
Cedrick May's *The Collected Works of Jupiter Hammon* offers a complete look at the literary achievements of Jupiter Hammon, one of the founders of African-American literature.

POINTS OF EXCELLENCE

UTA saw a 54 percent increase in business graduates in spring 2018 vs. spring 2017.

MAV ROUNDUP

TRANSFORMATIVE CHANGES

PAYING IT FORWARD

Alumnus, business titan returns to his roots

When Harry Dombroski ('79 BBA) graduated from UTA, he knew he was more than ready to enter the workforce. Now, in his new role as dean of the College of Business, he is eager to ensure that every graduate leaves with the same level of preparedness.

"We are located in one of the largest and fastest-growing economies in the nation, and our College of Business needs to be right at the center of this growth," says President Vistas Karbhari. "Harry is a visionary leader who will raise the visibility of the college, enhance its stature through transformative advances, and propel the College of Business into a position of international competitiveness."

Dombroski's extensive ties to corporations in the Metroplex and 30-plus years of experience in the corporate sector played key roles in his appointment.

"Harry knows the desires of employers and how to match the rapid change of the industry," says Teik C. Lim, provost and vice president for academic affairs. "Bringing in a person with that firsthand knowledge will better position UTA among business leaders and help to serve our students with better opportunities after they graduate."

Dombroski is described by his peers as an out-of-the-box thinker and a results-oriented leader. As a longtime executive with Hunt Oil Company and Hunt

Consolidated, he oversaw the company's business development initiatives, which included the acquisition of Pacific Enterprises Oil Company, and the expansion of Hunt's Tuscaloosa refinery.

"I believe that Harry has the skill set to become an absolutely outstanding dean of the UTA College of Business," says Ray Hunt, executive chairman of Hunt Consolidated. "Further, as a graduate of UTA, he has the ability to differentiate himself and UTA in the very competitive marketplace of higher education in North Texas."

In his role as dean, Dombroski looks forward to expanding UTA's relationship with community partners and increasing student opportunities for internships and career entry.

"The education that I received at UTA was the spark that fueled a long, rewarding career," Dombroski says. "I look forward to being able to pay that back to current UTA students and future graduates."



Faculty Focus

WHEN UTA BEGAN looking for a new dean for the College of Architecture, Planning, and Public Affairs, the search committee sought a leader who could push the boundaries of architecture and urban planning. They found that in Adrian Parr, previously a political science professor with a joint appointment in architecture and interior design at the University of Cincinnati. She's also the holder of the UNESCO Chair on

Water Access and Sustainability, director of the Taft Research Center, and a distinguished fellow of the Global Center for Advanced Studies. Joining Dr. Parr will be her husband, Michael Zaretsky, who will serve as associate professor in the Department of Civil Engineering and director of the Architectural Engineering program.



Adrian Parr, *Dean*
College of Architecture,
Planning, and Public Affairs

What past accomplishment makes you proudest? Producing *The Intimate Realities of Water* documentary. The film humanizes water and sanitation data by following the everyday lives of four women living in the slums of Nairobi, Kenya. The project was the result of finding a format that would enable the women to represent themselves on their own terms. It is important to me to be alert to the power dynamics that come into play with the privileged position I occupy as a white, Western, professional woman when working with disadvantaged populations, such as the women in the film, and more importantly, to rectify, as much as I can, the power imbalance this creates.

What are you excited about right now? I am thrilled to serve the faculty and students of

CAPPA and to join the UTA community. The college has a wonderfully dynamic range of research interests and creative talent. I am especially excited to spotlight the strengths of CAPPA across the Dallas-Fort Worth Metroplex and on the national and international stages. The grand challenges facing communities across the world may be complex in nature, but they also require simple and elegant solutions that maximize impact with minimal resources. CAPPA's design, planning, and policy disciplines will make important contributions in addressing the world's most pressing problems because they all, in their respective ways, tend to broach a problem from a variety of angles with a future-oriented and innovative outlook.

What are you most looking forward to? Seizing this opportunity to join and lead the CAPPA community to advance the public good.

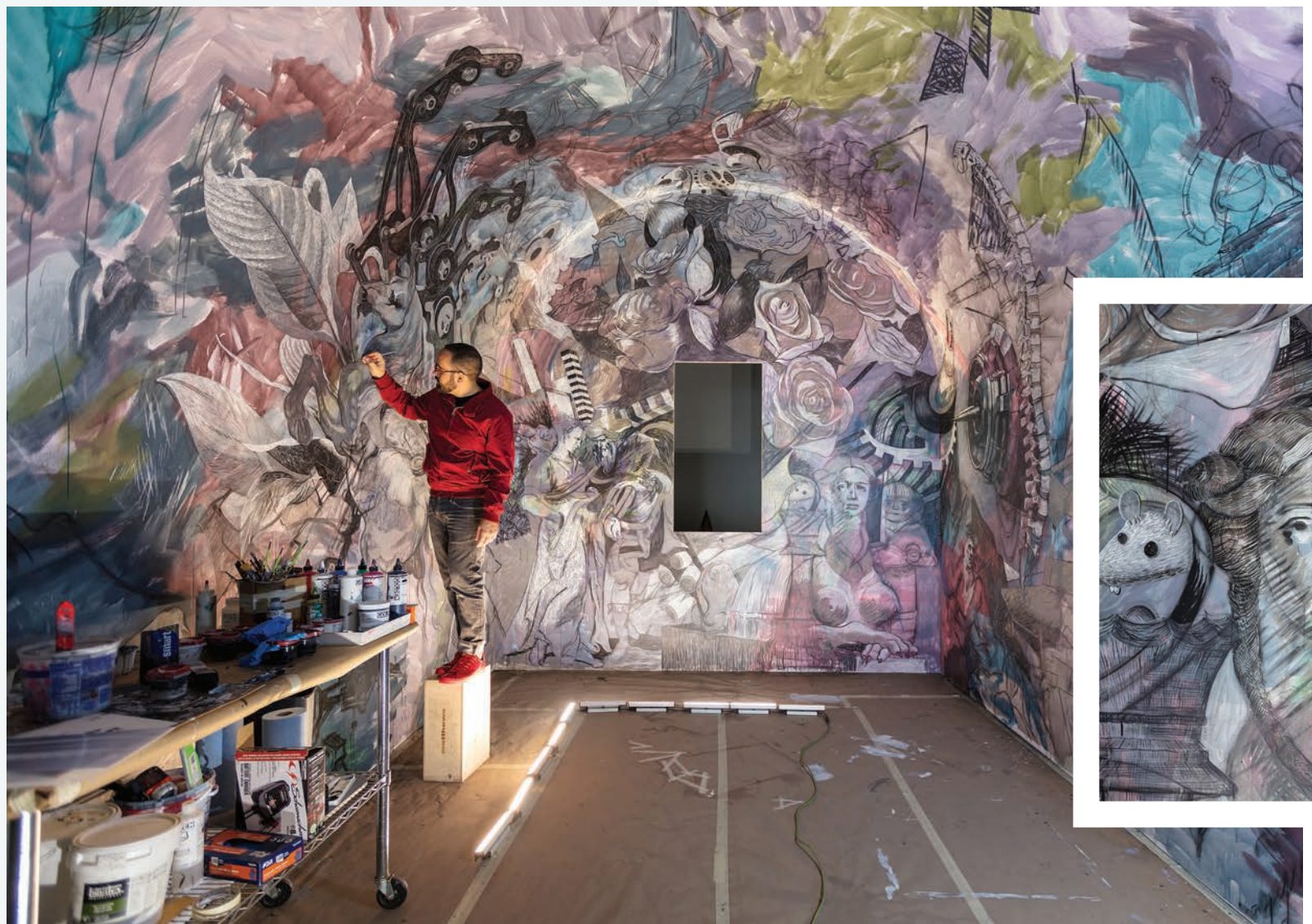
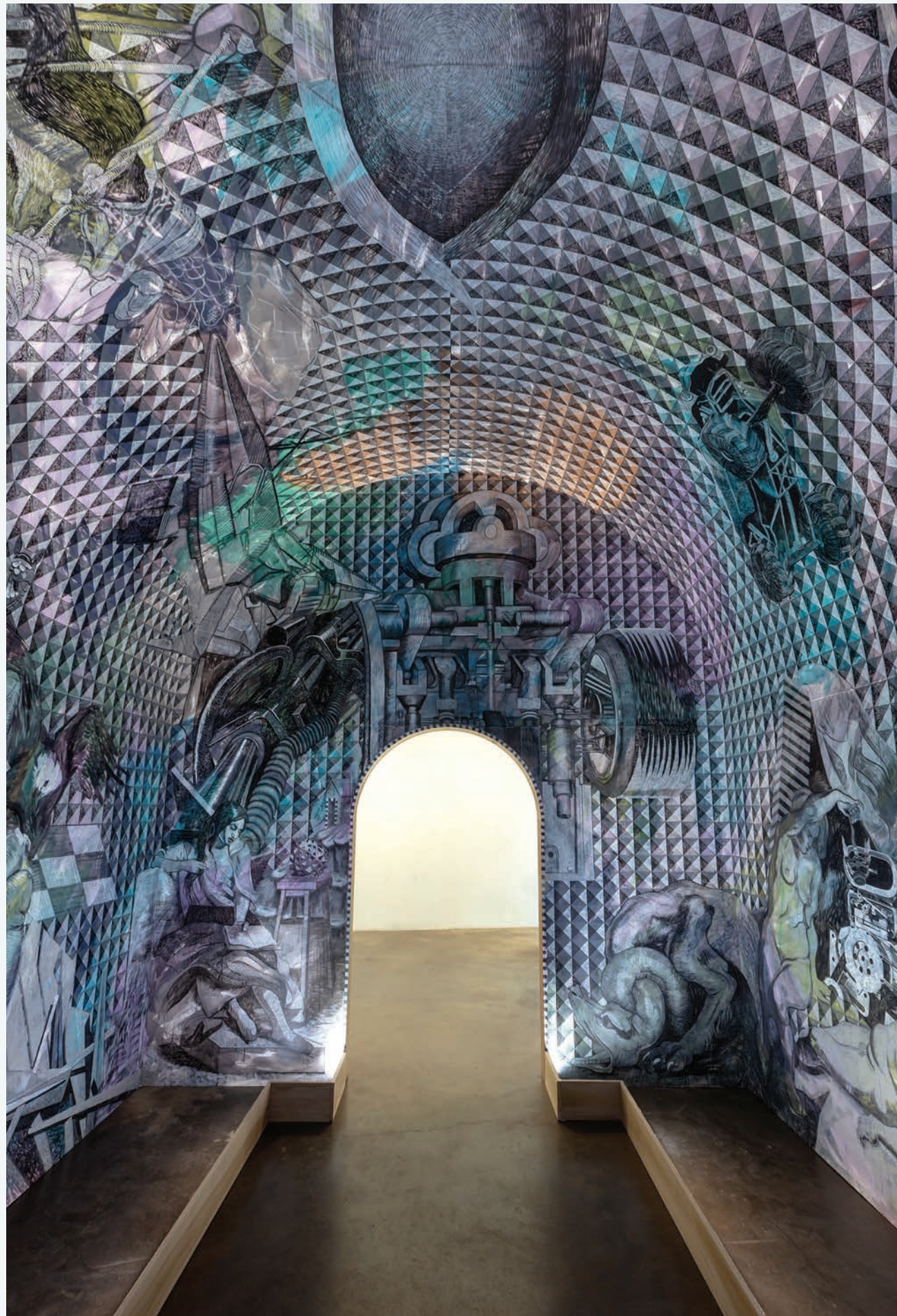


Gallery



Francisco Moreno
An artist whose work bridges then and now

JOURNEYS ARE IMPORTANT to Francisco Moreno ('10 BFA, Painting). Whether it's a journey from place to place or past to present, he is interested in creating art that explores those transitions—and how they can come to define who we are. "As a Mexican-born American citizen, I pull from an archive that references ideas that traverse borders, an abstract allegory for my identity," he says. With *Chapel*, which debuted at the Erin Cluley Gallery in Dallas, Moreno created an entire structure that brings these ideas together. Turn the page for a look inside.



EXPLORE
Step inside
Moreno's
Chapel at
uta.edu/mag.

Take a look
at Moreno's
latest work on
his Instagram
account,
[@morencisco](https://www.instagram.com/morencisco).

"As a Mexican-born American citizen, I pull from an archive that references ideas that traverse borders, an abstract allegory for my identity."

Moreno's *Chapel* was specifically inspired by a visit to the 12th-century mural paintings of the Hermitage of the Vera Cruz de Maderuelo. In 1947, the mural fresco paintings were transferred from their original location in the municipality of Maderuelo to canvas and reconstructed at the Prado Museum in Madrid.

"The experience of the thoughtfully handpainted beauty was overwhelming," he says. "The fact that the murals are displaced from their original location felt peculiarly familiar, as I have been perplexed by notions of identity since my family left Mexico City in order to relocate to Arlington."

For *Chapel*, Moreno designed, constructed, and painted the interior of an all-encompassing 16-by-12-by-13-foot barrel-vaulted structure, which was inspired by Spanish Romanesque chapels. His focus was engaging the past while making a new mark, so the interior is filled not with religious iconography, but layered sketches that he

described to *The Dallas Morning News* as a "giant drawing, a stream-of-consciousness collage."

THE ARTIST'S JOURNEY

For Moreno, becoming an artist was also a journey largely shaped by his travels. As an undergraduate student in architecture at another Texas university, he was looking for a career path he could be passionate about. But architecture didn't fit. He took an industrial design course at the Tec de Monterrey campus in Queretaro, Mexico, but that wasn't quite right, either. He eventually transferred to UTA, where he took an intermediate painting class—and he never looked back.

"The faculty at UTA were very generous with their time, and the art studios are fantastic," he says. "I'm glad I was able to find my way at UTA. It showed me I could really pursue the arts."

Looking to the future, Moreno is willing to go wherever his creative pursuits may lead.

"Right now, I'm just painting and drawing, thinking of new, crazy ideas," he says. "Creativity is like anything else—you just have to put in the work."

CAMPUS BUZZ

Connect with UTA across all social media channels with the handle @utarlington.

Congratulations to my friend @CoachOG on becoming the next head coach for UT Arlington. He is the true definition of a player's coach! Big things ahead for him and his program.

—@KDTrey5
(Kevin Durant)



Hey, it's not all bad. #accountingmajor #hammocklife —@lane.on.fire

Internship interview went well yesterday. Fingers crossed I get this position for the stormwater management dept. It's the first step for my career! #geologymajor

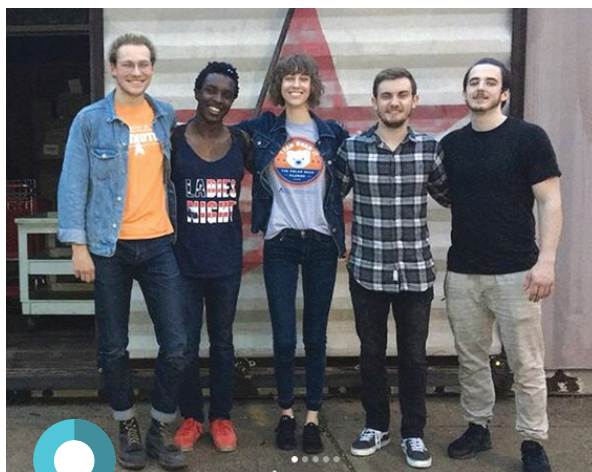


Sarah Mendoza
@SAMendoza89

You're now looking at the Environmental Management Intern for the Stormwater Management Dept. #internship #goals

Sometimes we take breaks from the wall to lift in other places. We had an awesome time serving the community, and we're very grateful to have been given this opportunity!

—@utacimbing-mavericks



<< Mission Arlington/Mission Metroplex

"As hard as it was, I knew I couldn't give up. I had to finish not only for myself but for my children who looked up to me. I took a couple classes at a time, and there were times I had to take breaks completely. Here I am, 10 years later, finally ready to cross that stage."

DANIELLE WHARRAM ('18 BA, ENGLISH), winner of the 2018 MavGrad cap contest



CHART-TOPPER

ATHLETE ON THE RISE

NCAA champ Alexis Henry dominates the record books

"Rock star." That's what UTA women's associate head track and field coach Jordan Durham calls Alexis Henry.

With the way the senior mathematics major has made a habit of rising to the top of the charts, that's a fitting description.

Heading into her final season, Henry's name is etched atop the UTA track and field record book in an astounding four different events—indoor high jump, outdoor high jump, indoor pentathlon, and outdoor heptathlon.

Earlier in the year, Henry grabbed second team All-America honors at the NCAA Indoor Championships. In June,

she became the first UTA woman ever to win an individual national championship, taking the title in the women's high jump at the 2018 NCAA Outdoor Track and Field Championships. She now holds more records than any other athlete in UTA history.

Henry's talents go beyond the field as well. She has appeared on the Sun Belt Conference Academic Honor Roll and has been a **UTA Texas Trust Scholar-Athlete** recipient. In addition, she was named the MAVS 1000 Peer Leader of the Year in fall 2017 for her

work with the seminar course that educates students on academic and personal skills, as well as engagement beyond the classroom.

"I've made such strong bonds here," Henry says. "Your team becomes a family. They keep me motivated and positive. Coming out of high school, I knew I had to make the best decision for me—and I did."

Teaching and coaching are her ultimate career goals, but immediately after graduation, Henry plans to take a leap of faith and attempt to compete professionally. Her sights are set on the 2020 Olympic Games in Tokyo, Japan.



"Your team becomes a family. They keep me motivated and positive."

SPORTING MAVS

SHARP SHOOTERS

DREAM TEAM

Women's wheelchair basketball team earns another national championship

The Lady Movin' Mavs ended its historic 2017-18 season on a triumphant note. With a 65-55 point win over the University of Alabama, the wheelchair basketball team claimed their second national championship title in three years at the 2018 National Intercollegiate Wheelchair Basketball Tournament. It was the pinnacle of a season in which the team compiled a 20-0 record.

Elementary education senior Rose Hollerman was recognized as the tournament's MVP after she led the team with 30 points and six rebounds.

"It's always an honor to see that the coaches within our league recognize and respect the work I've put toward this game," Hollerman says. "Everyone on our

team plays for one another, and I know that's why I received this award."

Hollerman's teammates also scored big in the championship. Kinesiology senior Abigail Dunkin raked in 14 points and grabbed six rebounds, while graduate student Morgan Wood made the last shot of the game with 39 seconds left.

"We have the same core that has been in three of these big games now, and to see them go out there one last time and fight for another championship was very special," says Head Coach Jason Nelms. "They have helped grow this program and built such a bright future for it, and the doors they are opening for future generations are countless."



REDSHIRT RETURN

TIME TO SHINE

Returning star heralds a stellar season for women's basketball

The future looked bright for UTA women's basketball when Cierra Johnson began her freshman year. She was part of a No. 1-ranked signing class, and analysts said it was likely that the team would make a run at the Sun Belt Conference title. Indeed, when Johnson's senior year came, the team was picked No. 1 in the preseason polls. She was the reigning Defensive Player of the Year.

Three games into the season, Johnson was on fire in the first quarter at UT San Antonio. She poured in 11 points and appeared unstoppable. But as she tried to come up with another steal, a Roadrunner knocked into her, ending her season with a knee injury. The team would finish the season third in the Sun Belt Conference.

Declared eligible for a medical redshirt season, Johnson will step onto the court again in 2018-19, ready to make another run at the conference title. She is on pace to shatter UTA's and the Sun Belt Conference's all-time steals records, and she will have a go at becoming the 19th player in program history to join the 1,000-point club.

This year the No. 1-ranked signing class featuring two state champions, two state semifinalists, and a state tournament MVP will join Johnson in the quest for the title.



NET GAIN

A NEW ERA IN BASKETBALL

Veteran coach appointed to lead the Maverick men's team

With the appointment of former Big 12 and Southeastern Conference Assistant Coach Chris Ogden, men's basketball is poised to rise to the top in the 2018-19 season. He is the eighth head coach in the program's nearly 60-year history.

A Texas native, Ogden played for Head Coach Rick Barnes at the University of Texas and served on his staff for a combined 13 seasons there and at the University of Tennessee. He spent the last two seasons as an assistant coach under Head Coach Chris Beard at Texas Tech University.

"Starting with his playing days, Chris has been a winner," says Director of Intercollegiate Athletics Jim Baker. "I look forward to him helping us continue to guide our men's basketball team to greater heights."

In college, Ogden played in four straight NCAA championship tournaments and a Final Four. As a coach, he has been to numerous NCAA Tournaments, recruited some of the country's top classes, and developed several NBA

first-round draft picks.

During his 15 years at UT Austin, Tennessee, and Texas Tech, Ogden helped lead teams to 11 total NCAA Tournament appearances, including three regional finals.

"I am extremely honored to serve as the head men's basketball coach at UTA," Ogden says. "I have dreamed of having the opportunity to lead a program in my home state. UTA has an excellent reputation as a world-class institution, and I look forward to building on the program Coach Scott Cross developed. We will operate this program in a manner that our supporters expect—with class, hard work, and success on and off the court."

"Starting with his playing days, Chris has been a winner. I look forward to him helping us continue to guide our men's basketball team to greater heights."



GREAT EXPECTATIONS

FOR THE LOVE OF THE GAME

Softball advances to postseason play

On a warm evening in Stillwater, Oklahoma, UTA softball took on Oklahoma State University, a nationally ranked program coming off of a sweep at Baylor University. That night, the Mavericks dominated in a 9-2 win, guided in large part by Coach Peejay Brun's infectious enthusiasm for the game and her focus on building team unity and spirit.

In Brun's first season, the Mavericks earned their second consecutive 30-win season and reached the final four of the highly competitive Sun Belt Conference championship tournament. For the first time in program history, the team advanced out of a postseason regional in the National Invitational Softball Championship.

"The big thing that was accomplished was building a strong foundation for the future," Brun says. "The winning was always nice, going further in the postseason was nice, but I knew that if we didn't build a solid foundation, future years would just crumble on me."

For UTA, the future is looking strong with a wealth of talent returning next season. National Fastpitch Coaches Association All-Region selections Laura Curry and Reagan Wright will lead a squad that loses just three seniors.

"The team was able to find a way to have fun but still compete," Brun says. "All of that togetherness was amazing, and it will really help us next year."





The University you remember has changed, and it continues to evolve to meet the needs of our communities near and far. As a model 21st-century urban research university, it is what we are called to do.



ILLUSTRATIONS BY
GUILLAUME GENNET,
REPRESENTED
BY LEMONADE
ILLUSTRATION AGENCY

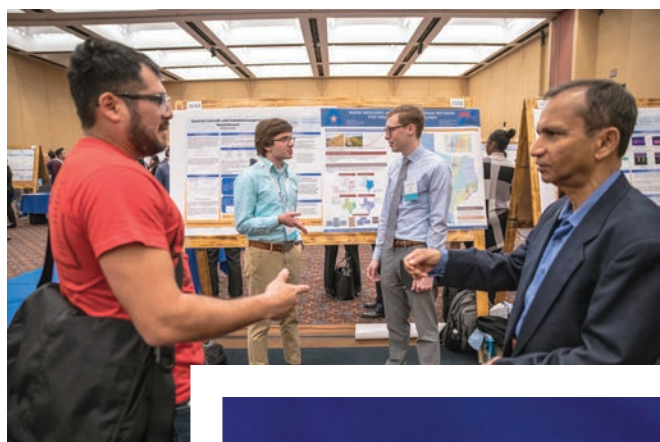
EVEN BEFORE UTA President Vistasp Karbhari took the helm in 2013, he made a bold claim: UTA was well on its way to becoming a model 21st-century urban research university. His role, he said, was to lead the University to the realization of that goal—and his objective is detailed in the University’s Strategic Plan 2020 Bold Solutions | Global Impact. Guided by the plan’s four broad themes—health and the human condition, sustainable urban communities, global environmental impact, and data-driven discovery—and bolstered by its guiding aspirations, the University has set a path to unprecedented excellence in research, teaching, and community engagement.

The role of the public research institution is well-defined. In simple terms: Most public research universities are founded and operated by state government entities. As such, public universities must serve the public; as a result, they must be nimble and adaptable, growing and changing to meet the needs of their ever-evolving communities.

For The University of Texas at Arlington to be the model 21st-century public research university, we had to become a university of constant assessment and action. It’s an ongoing, daily process: We evaluate where we are, uncover the unique challenges our communities are facing, find solutions and put those solutions into action. We then share those solutions with the state, the nation, and

the world. They are absolute imperatives that guide everything we do.

In the coming pages, we have gathered stories that bring these imperatives to life. The stories highlight how research conducted on our campus can have a transformative effect on cities near and far, and how UTA is solving some of society’s most pressing problems. They illustrate that in times of crisis, the work UTA does can provide relief to those who need it most. Through all the work we do, we ensure equal access to higher education for all students. Together, these stories reflect a university constantly at work, striving for excellence above all and setting the standard for other universities to follow.



MAKING THE MEGACITY p. 32

As the Dallas-Fort Worth Metroplex approaches megacity status, UTA researchers are doing all they can to ensure that the region’s growth is sustainable. Their work has implications for growing cities worldwide.



EXCELLENCE FOR ALL p. 38

Public universities must provide equal access to higher education. Guided in part by two renowned faculty members, UTA is on top of Texas’ changing demographics, removing obstacles for students seeking higher education.



SOFTENING THE BLOW p. 44

As Texas marks the first anniversary of Hurricane Harvey, we’re exploring UTA’s research and outreach before, during, and after the storm—work that helped ease the effects of Harvey and could help mitigate the impact of future storms.



CYBER SUPERHEROES p. 50

Second in the nation for cyber victimization, Texas is in need of highly skilled cybersecurity professionals. Globally, cybercrimes are at an all-time high. UTA researchers are working to solve cybersecurity problems on all fronts.



MAKING THE

CITY

OF

THE

As the Dallas-Fort Worth Metroplex surges toward megacity status, UTA is leading the way in ensuring the region's healthy, sustainable growth.
BY ERIC BUTTERMAN



LOCATED IN the fourth-largest metropolitan area in the United States, the city of Arlington is a locus of progress between Dallas and Fort Worth in a region that is well on the way to reaching megacity status. The megacity mark is a population of 10 million, and the Dallas-Fort Worth-Arlington region recently clocked in with more than 7 million, according to the latest U.S. Census Bureau data. With a population gain of 146,000 residents in 2017, the area also charted the largest growth of any metro area in the United States. “As urbanization increases, so do issues of sustainability, infrastructure, social inequity, and health,” says President Vistasp Karbhari.

“More than 65 percent of Dallas’ population has access to less than 4 percent of jobs by transit,” says Shima Hamidi, CAPPA assistant professor and IUS director. “This shows just how much DART [Dallas Area Rapid Transit] and the city of Dallas need to work together to provide better access for a transit-dependent population.”

Dr. Hamidi and her team are also working with Tarrant County, looking at walking, driving, and transit in different neighborhoods. Their research

“Megacities pose an unprecedented need for bold solutions on a global scale, and UTA is uniquely positioned to address these challenges.”

It comes down to one question: How do we ensure that growth is healthy and sustainable? Researchers at UTA are tackling that question head-on and answering with discovery, innovation, and impactful solutions.

SOCIAL MOVEMENT

In the College of Architecture, Planning, and Public Affairs (CAPPA)—a college devoted to issues surrounding building and supporting sustainable communities—students begin working on vital urban concerns early in their academic careers. As graduate students, they gain hands-on experience in surrounding communities through work in the Institute of Urban Studies (IUS). Of late, that experience has included thorough investigations of transportation concerns in the city of Dallas. What IUS researchers have found is that much of Dallas is having trouble just getting to work.

focuses on connections between transportation and quality of life and the effects of those connections on the economy. In terms of sociodemographic parity, Hamidi’s research indicates that poor areas score low in access to opportunity. A lack of affordable housing is a key factor, as affordable units are often located away from the urban core and not walkable.

“When you think of affordable housing, you think of the intent to provide more affordability for lower-income families, and that may be true with regard to subsidies and other incentives,” she says. “But if you add transportation to housing costs, you see a substantial percentage of households living in these units in DFW end up spending even more on transportation than housing, leaving little discretionary income for food, health care, and other household purchases.”

The hope is that this kind of research will lead to social change through a call to action. Hamidi and her research team note that to achieve true affordability, development should be located where jobs can be reached,

with access to places like schools and health care facilities. In addition, conveniently located affordable housing further encourages the integration of low-income populations into the economy.

While researchers in the IUS collect data and advise cities on how to translate that data into actionable solutions, their work continues to grow. Hamidi notes that over the last two years, the IUS has seen its grants and contracts increase tenfold, keeping the institute's more than 22 doctoral and master's students busy—with an eye on finding data that can make a difference.

In addition to the IUS, the Center for Transportation Equity, Decisions, and Dollars (CTEDD), which is led by Hamidi, is conducting nationally significant research on transportation policy issues, equity, shared mobility, technology, and autonomous transportation. CTEDD has already forged significant partnerships in the region and the state, initiating research projects that assist policymakers.

HEALTHY OUTLOOK

In a megacity, access is always a concern, particularly when it comes to quality health care. A report by Moody's Investors Service indicates that Texas as a whole is suffering from a severe nursing shortage. According to a 2016 report by the Texas Department of State Health Services, the demand for registered nurses in North Texas is projected to exceed the supply by about 15,600 in 2030.

It is a problem that the College of Nursing and Health Innovation (CONHI) is working to solve. CONHI is the largest nursing program in the state, thanks in part to UTA's focus on technology, with online programs and simulated training experiences that allow nontraditional and nonlocal students opportunities to earn nursing degrees.

Creating more access also includes a focus on excellence. According to *U.S. News & World Report* rankings, UTA's graduate nursing degrees chart among Texas' best, and the Doctor of Nursing program is ranked the second-best program in the state.

"Notable here are the small faculty-to-student ratios and the extensive talent and skill of a doctoral-prepared faculty," says Anne Bavier, dean of the college. "Our nationally recognized research on issues of health and the human condition gives learners unique opportunities to use and influence science. Our exceptional pass rates provide clear evidence of our success."

Not only is the college supplying Texas' workforce with highly skilled nursing graduates, it is also working to provide communities with support through discovery and outreach.



Clockwise, from top: Shima Hamidi (center) leads a research project; Ali Abolmaali (right) consults with an engineer; the Dallas Street Choir rehearses before a performance at Carnegie Hall.



Not only is the college supplying Texas' workforce with highly skilled nursing graduates, it is also working to provide communities with support through discovery and outreach. In 12 research labs devoted to health and the human condition, leading projects include a free exercise program for children with developmental coordination disorder and an elderly interface study using sensors to assess fall risk.

Community health is also a focus in the School of Social Work, where faculty and students are serving citizens in a variety of sectors. A current initiative is the Dallas Street Choir project, led by Assistant Professor Anne Nordberg and Associate Professor Courtney Cronley. Dr. Cronley is also leading a multidisciplinary project called GOE! (Gardening and Outdoor Engagement), which engages homeless teens both physically and mentally in gardening projects. Cronley and her group are currently working on creating a national curriculum.

"Our students get the chance not only to learn from the great minds represented through our faculty, but also to participate in professors' community and research projects," says Social Work Dean Scott Ryan.

"Hands-on research gives students an extra opportunity to impress future employers, which is vital in our field."

UTA estimates that 90 percent of social work's 115 master's and doctoral students will have positions in the workforce upon graduating this spring.

With funding for research steadily increasing each year—from \$2.3 million in 2014 to \$3.6 million and growing today—and a rise in *U.S. News & World Report's* national rankings (it's now in the top 35), the School of Social Work is poised to make an even bigger impact on the health of our burgeoning communities.

IMPROVING INFRASTRUCTURE

In addition to providing support that directly impacts the health of citizens, UTA is concentrating on making sure the physical structures where we live, work, and play are strong. This research, which seeks to bolster aging infrastructure and build a stronger one for the

This research, which seeks to bolster aging infrastructure and build a stronger one for the future, is a focus for the College of Engineering.

future, is a focus for the College of Engineering.

In the Department of Civil Engineering, faculty are forging new methods to reinforce and extend the life of the pipes that support our cities' water systems. Ali Abolmaali, chair of the department, has been awarded \$3.63 million in recently completed or ongoing research grants and projects during the last five years. His work is leading to a new industry standard in fiber-reinforced pipes, now used in highway projects in Texas.

Working with the city of Arlington, his team has inspected 46 miles of underground sewer pipes for failure and other issues and is now prioritizing which pipes need immediate reinforcing. If the Arlington project yields success, it could be adopted by other North Texas municipalities, leading to similar projects statewide.

The department is also working to extend the life of our bridges. Professor Nur Yazdani, through a contract from the Texas Department of Transportation totaling nearly \$600,000, leads a team focused on testing a carbon fiber-reinforced polymer for strengthening deteriorated or deficient bridges in the area, potentially an economic and durable solution. He was also awarded a three-year, \$735,133 contract to inspect and evaluate new and existing concrete bridge components using nondestructive methods. The project will involve assessing the true in-service load capacity of bridges, which will be helpful in making informed decisions for repair versus replacement. Associated work involves looking at the effects of extreme disaster events.

These are just a few of the college's many projects that focus on infrastructure. In fact, in the College of Engineering—one of the most comprehensive engineering schools in Texas—researchers are working on a range of issues, from extending the life of Texas highways and byways to helping ease traffic congestion to improving waste management practices globally.

"This is an exciting time in the College of Engineering, as we have many talented professors who have different approaches to problems," Dr. Abolmaali says. "They're all incredibly committed to seeing their work through."

A SUSTAINABLE FUTURE

Beyond the work being done in the College of Engineering; the College of Architecture, Planning, and Public Affairs; the College of Nursing and Health Innovation; and the School of Social Work, every college on the UTA campus is working in some way to support our growing megacity. And our researchers are sharing their knowledge through collaborations with universities near and far—across the globe, in some instances.

"When it comes to transportation, water, infrastructure, and sustainability, UTA is finding new solutions and helping North Texas implement them," President Karbhari says. "Because of these discoveries, communities across the world will look to UTA for guidance in creating more livable spaces for an ever-changing environment." **UTA**

EXCELLENCE FOR ALL

While every young person should have the opportunity to succeed, the data shows that many do not. UTA is continuing its innovative work to change that outcome.

BY HILLARY GREEN PHOTOS BY JUSTIN CLEMONS

Michele Bobadilla (left) and Maria Martinez-Cosio have been instrumental in helping provide Hispanic students at UTA with opportunities to succeed.



“UTA’s demographic changes may serve as a forecast for changes that other higher education institutions across the country may experience in the next decade.”



TEXAS’ POPULATION IS booming, with nearly 28 million residents counted in the 2016 U.S. census. That is an increase of about 2.7 million people since 2010, and the data shows that more than half of that increase is attributed to the state’s growing Hispanic community. Public schools in Texas have become majority-minority, with Latinos composing 52 percent of the student population.

While more than 3.5 million Hispanic students in the U.S. were enrolled in public and private colleges in 2016—a number that continues to grow each year—the population remains the most underserved and under-represented in higher education. In fact, even though more Hispanics are getting a postsecondary education than ever before, a 2016 Pew Research Center study noted that they still lag behind all other groups in four-year degree attainment. Among Hispanics ages 25–29, just 15 percent have a bachelor’s degree or higher. In Texas, about 38 percent have a bachelor’s degree or higher, compared to 71 percent of Anglos.

The disparity between Texas’ growing Hispanic population and that population’s postsecondary credential achievement is something colleges and universities across the state are working to address. The future of Texas depends on closing that achievement gap. Growing a highly educated workforce means bolstering our state’s knowledge, resourcefulness, and productivity. A highly educated workforce leads to more innovation and economic opportunity. Overall, the size of Texas’ Hispanic population makes it one of the largest underserved economic resources in the state. Increasing opportunity for Hispanics helps build Texas into an economic powerhouse that will continue to be competitive with countries across the world.

UTA is leading the way in developing programs to meet the needs of this rising demographic as well as our ever-evolving workforce. From the classroom to the boardroom, UTA is building an admission-to-graduation pathway to ensure that all students have every opportunity to succeed. The University’s efforts have not gone unnoticed, and after being designated a Hispanic-Serving Institution (HSI) in 2014 by the U.S. Department of Education, UTA has only continued to garner recognition for its focus on increasing access to opportunity for all students. In 2017, *Diverse: Issues in Higher Education* ranked UTA among the top universities in the country for conferring degrees to minority students and No. 18 overall for awarding bachelor’s degrees to Hispanic students.

“[HSI] designation is aligned with the mission of our University, which is to be an internationally recognized research university distinguished by excellence in every regard and by the access we provide to students from all backgrounds,” says President Vistasp Karbhari. “It builds on the tremendous diversity, talent, and dedication of our faculty and staff and will help us provide appropriate levels of support to ensure that each and every student has the opportunity to excel in all aspects of their academic careers.”

Included in these talented and dedicated faculty and staff members are two prominent UTA administrators, Maria Martinez-Cosio and Michele Bobadilla, who have been instrumental in the University’s outreach to its Hispanic students.

NATIONAL IMPACT

For Maria Martinez-Cosio, associate vice provost for faculty development and associate professor in UTA’s College of Architecture, Planning, and Public Affairs, increasing education access for underserved populations is more than just a job—it’s a culmination of a lifetime of experiences.

As an immigrant and first-generation college student, Dr. Martinez-Cosio understands the challenges that students can face when considering college. She learned English as a second language in junior high and did not consider college until a high school counselor encouraged her. She balanced classes and a job driving a bus in order to afford school. After going on to earn a bachelor’s, two master’s, and a doctoral degree, she is now using her experience breaking down the barriers of entry to higher education to help UTA students.

Martinez-Cosio guided UTA’s successful application for HSI designation. As an HSI, UTA is eligible for federal grants designed to assist first-generation students, many of whom are low-income Hispanic students. To qualify, schools must have at least 25 percent Hispanic undergraduate enrollment. As of fall 2017, UTA has a 27 percent Hispanic undergraduate population and serves more Hispanic students than any other four-year public university in North Texas. UTA is one of only 10 universities in the nation to achieve the designation of both

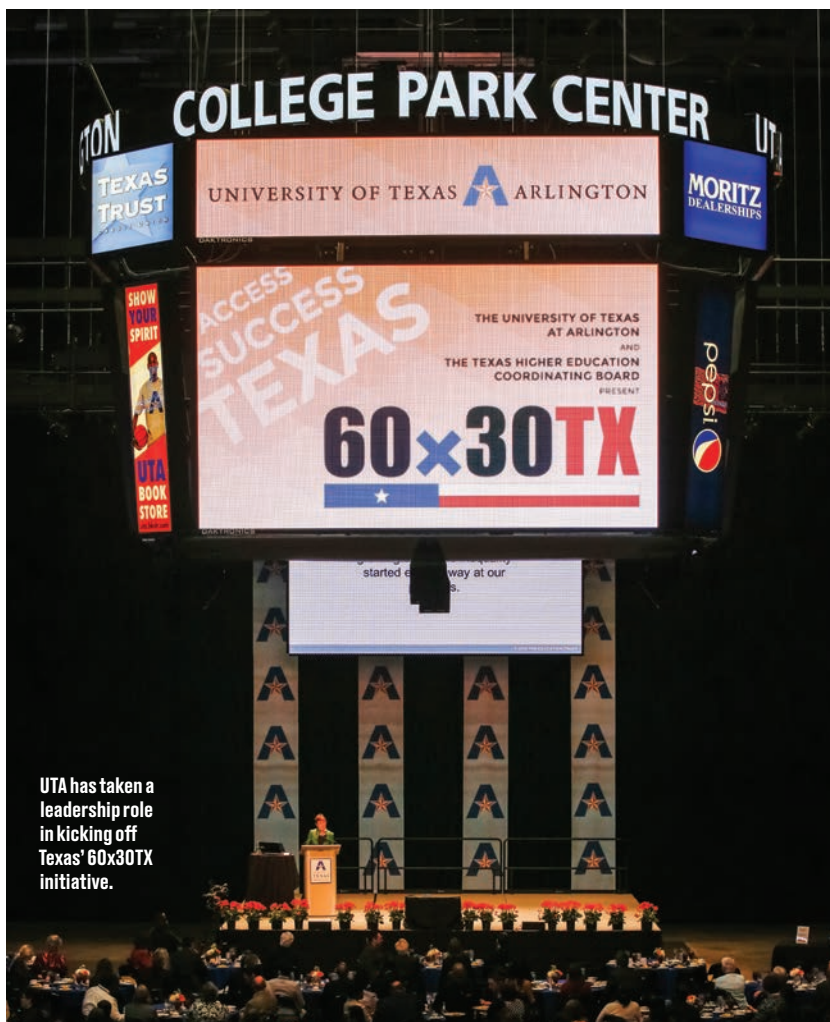
Hispanic-Serving Institution and R-1: Highest Research Activity by the Carnegie Classification of Institutions of Higher Education.

Since being named an HSI, UTA has won a five-year, \$2.63 million Department of Education grant to enhance services for transfer, nontraditional, and underserved students. The grant, of which Martinez-Cosio is the co-principal investigator, allowed the creation of the IDEAS (Innovation, Diversity, Excellence, Access, and Success) Center.

The IDEAS Center offers access to support services for students in transition, particularly transfer students, veterans, and those from underserved populations. The grant also provides funding for the professional development of faculty members, exposing them to innovative methods of teaching to help them build connections with first-generation students.

Not only is Martinez-Cosio leading outreach and support efforts on UTA’s campus, she has also stepped into a national leadership role to advance Hispanic stu-

UTA is one of only 10 universities in the nation to achieve the designation of both Hispanic-Serving Institution and R-1: Highest Research Activity by the Carnegie Classification.



UTA has taken a leadership role in kicking off Texas' 60x30TX initiative.

dent success. The Alliance of Hispanic Serving Institution Educators recently elected her to a three-year term on the national board.

"I see this as a great opportunity for UTA to engage on a national level as an HSI," she says. "UTA's demographic changes may serve as a forecast for changes that other higher education institutions across the country may experience in the next decade."

Martinez-Cosio's efforts have received major recognition, and earlier this year, she was honored with Ford Motor Company's Mujeres Legendarias Award. She was one of just four "legendary women" in North Texas to be recognized as part of a national program celebrating Hispanic women for their commitment to improving their communities and embracing quality, safe and smart innovation, and sustainability.

"I follow in the steps of a long line of outstanding women in DFW and at UTA, and this recognition vali-

In 2017, *Diverse: Issues in Higher Education* ranked UTA among the top universities in the country for conferring degrees to minority students and No. 18 overall for awarding bachelor's degrees to Hispanic students.

dates the work of our UTA IDEAS team, not me as a singular author," she says, citing her co-principal investigators, education Associate Professor Carla Amaro-Jiménez and TRiO Director Jennifer Luken Sutton, as two dedicated Latina women who continually inspire her. "I believe that the work that our IDEAS team is engaged with—the partnerships we are developing with academic units, the tutoring we offer students, and the professional development we offer faculty—all will help more strongly connect students who were like me to UTA."

TRANSFORMING LIVES

The daughter of an immigrant father and migrant mother, Michele Bobadilla has tirelessly served the Hispanic community for more than 40 years as a champion for educational access and equal opportunity. She sums up her outlook toward working with underserved students by offering her favorite saying: "Adelante y con ganas!" ("Onward and with determination!")

As assistant provost for Hispanic student success and senior associate vice president for outreach services and community engagement at UTA, Dr. Bobadilla heads UTA's University Crossroads. The program aims to improve access to and increase success in higher education for first- and second-generation students from low- to moderate-income households.

University Crossroads was developed with a focus on the Texas Higher Education Coordinating Board's 60x30TX goal to improve college and career readiness across the state. Participants in the University Crossroads program have access to SAT prep classes, one-on-one advising, resume development, and other services to transform their college and career outlooks.

"UTA provides viable college-to-career internships that afford the application of book knowledge with real-world experiences through unique partnerships with industry leaders," Bobadilla says.

One such partnership is with Dallas Area Rapid Transit (DART). Students selected to participate in the UTA/DART Transportation Leadership Academy cohort receive instruction from and engage with DART corporate professionals at the highest level while receiving financial support to continue their studies. Experiential learning opportunities like this are making Mavericks among the most highly sought-after candidates entering the workforce today.

As a direct result of Bobadilla's advocacy, the United States Hispanic Chamber of Commerce Foundation recently named her chair of its new University Partnerships initiative. University Partnerships will help build a robust college-to-career pipeline between HSIs like UTA and corporations that partner with the foundation. Students will get a career boost from enhanced career readiness, and businesses will benefit from a talented, highly skilled workforce. Bobadilla wants to focus on cultivating internship opportunities for students, increasing their skill levels, and providing financial sta-

bility since many of these students will be working their way through college.

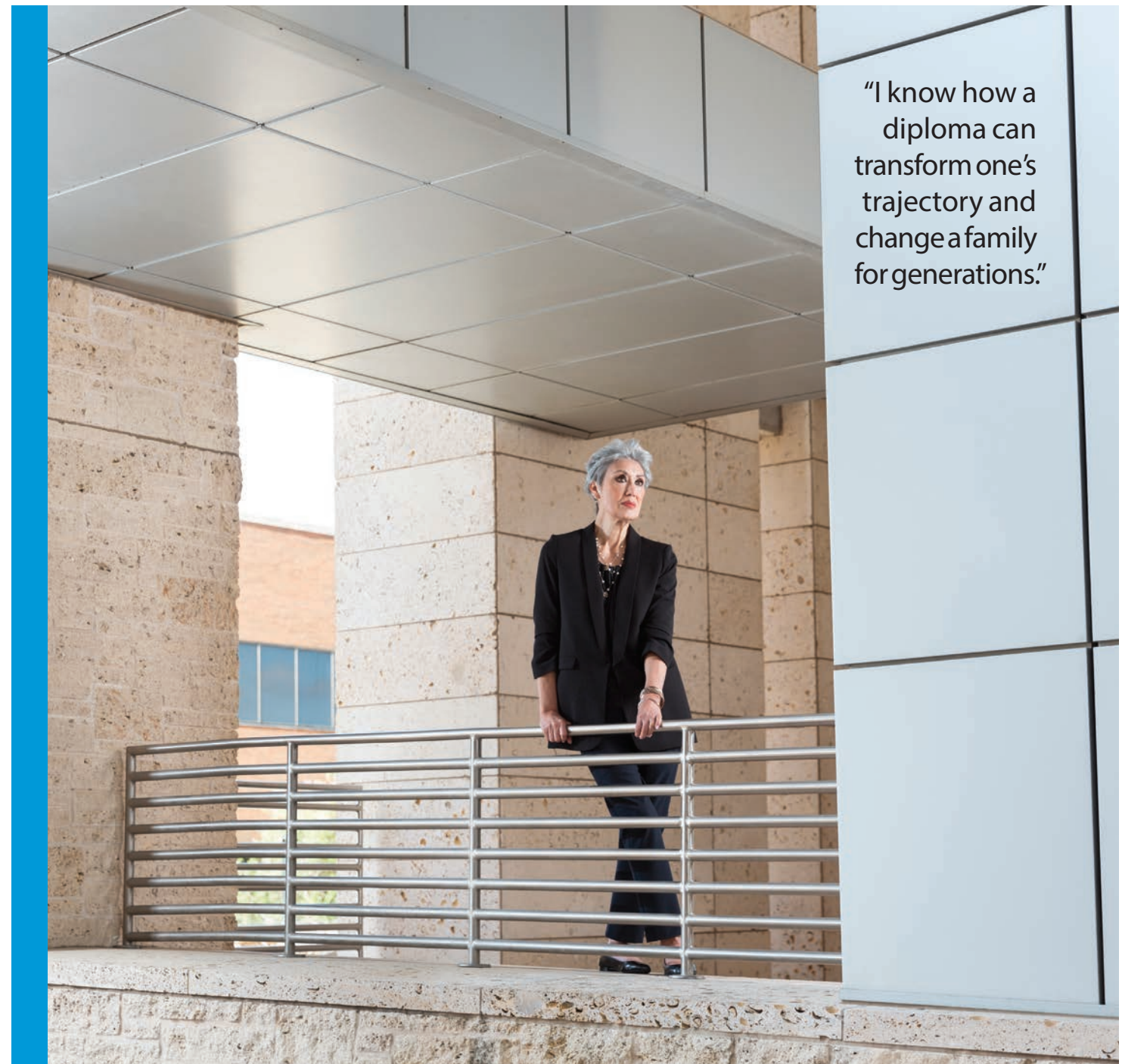
Bobadilla's decades-long endeavor to increase access and success for students, both in their educations and their careers, has earned her recognition from the Congressional Hispanic Caucus Institute, which awarded her its 2018 Medallion of Excellence. The honor is given to exemplary individuals who are role models and outstanding civic citizens for the Latino community, and Latino youth in particular. Winners must have at least a 15-year record of contributions and accomplishments in their field, with solid leadership and community involvement.

Bobadilla has long been an outspoken voice for un-

derserved students, particularly Latino students from economically disadvantaged households. She believes she has lived the promise of America and what the country stands for, remembering the Latinos who have come before her.

"I know how a diploma can transform one's trajectory and change a family for generations," she says. "I pledge to be a standard-bearer by using my voice as an advocate for change."

Martinez-Cosio echoes this, noting that the success of students who benefit from UTA's assistance will have a ripple effect within their communities. "I can't think of more important work to do." **UTA**



"I know how a diploma can transform one's trajectory and change a family for generations."



SOFTENING THE BLOW

When Hurricane Harvey made landfall as a Category 4 storm on August 25, just one day after UTA's fall 2017 classes began, faculty, staff, students, and alumni rushed to support their fellow Texans. BY MELINDA MAHAFFEY ICDEN



AS THE STORM ravaged South Texas, more than 40 student members of the Texas National Guard and the federal military reserves deployed to the area. During their activation, the students worked with their individual units on a variety of rescue and recovery efforts. Some searched through buildings to look for survivors, others cleared out rubble and opened roadways, and still others assisted the injured.

Additionally, four members of the UTA Police Department—Sgt. Tom Savage and officers John Morrison, Kris Ramirez, and Sharon Duty—volunteered to provide relief to their counterparts from the UT Health Science Center at Houston. For about a week, the UTA officers worked 12-hour shifts with officers from other UT campuses doing whatever was needed. Morrison says he spent the majority of his time loading, unloading, and transporting medical supplies or food. They hadn’t known what to expect before they arrived—just that one of the other UT institutions needed help.

“We knew that if we were in a similar situation, they would provide the same for us,” Morrison says.

IMMEDIATE SUPPORT

In Arlington, the University sent out emails to every member of the community who was known to be from one of the affected areas, checking on the safety of students and their families and letting them know that assistance was available—both academic and financial.

Hurricane Harvey had a particular impact on UTA’s online students in the Houston area, most of whom were enrolled in College of Nursing and Health Innovation programs and had potentially lost internet access or supplies, or not been able to reach the facility where they were to perform their clinicals. For students taking three- to five-week classes, professors worked to adjust exam schedules to help them continue with their studies. When some students ultimately chose to skip a session, the University allowed them to roll their enrollment forward without penalty. The college also worked with students to extend tuition payment deadlines.

“The faculty as a whole was very supportive of those impacted and those serving,” says Heather Snow, associate vice president for student affairs and dean of students. She says that in one large online chemistry class for nursing students, for example, about 50 percent of the students came from an affected area. To accommodate them, Seiichiro Tanizaki, assistant professor of practice in the Department of Chemistry and Biochemistry, created an entirely separate section of the course and shifted all of the deadlines. The new section gave students the first two weeks off and consolidated coursework so that all of the students would finish together at the end of the term.

UTA Libraries pitched in with relief efforts by hosting no-sew blanket work-

During Hurricane Harvey, Fang worked with researchers at Rice to help track and monitor the bayou’s water levels, allowing TMC officials to make timely decisions.

shops and joining forces with local libraries to collect used books and games to give to those temporarily living in shelters.

The previously scheduled Maverick Speakers Series lecture with actor and alumnus Lou Diamond Phillips, who hails from Corpus Christi, became a fundraiser for the University’s Emergency Assistance Fund. Other events from early September also dedicated proceeds to the fund. UTA was ultimately able to award a total of \$59,000 to 176 students who had unexpected financial needs due to the hurricane, which Snow says is about triple the amount awarded in any given year.

RESEARCH IN ACTION

Hurricane Harvey caused severe flooding largely because the rain had nowhere to go. In a highly urbanized city like Houston, concrete prevents water from being absorbed. As a result, the epic amount of rainfall during the storm largely became runoff at many watersheds, says Nick Fang, assistant professor of civil engineering. For Texas Medical Center (TMC), which sits alongside the flood-prone Brays Bayou, that could have been devastating.

But in the 1990s, TMC—the largest medical complex in the world, with member institutions such as the UT MD Anderson Cancer Center—invested in a flood-alert system, which Dr. Fang helped develop when he was a doctoral student at Rice University. The current version, known as FAS4, feeds real-time rainfall data from the National Weather Service and rain gauges into a hydrologic model to predict streamflow. The process repeats itself every five to 10 minutes, and the system can predict flooding conditions two to three hours in advance, sending out warning messages to related emergency personnel.



This photo by David J. Phillip reveals scenes that were all too commonplace during Harvey and its aftermath. The work of UTA researchers helped mitigate the storm’s impact.

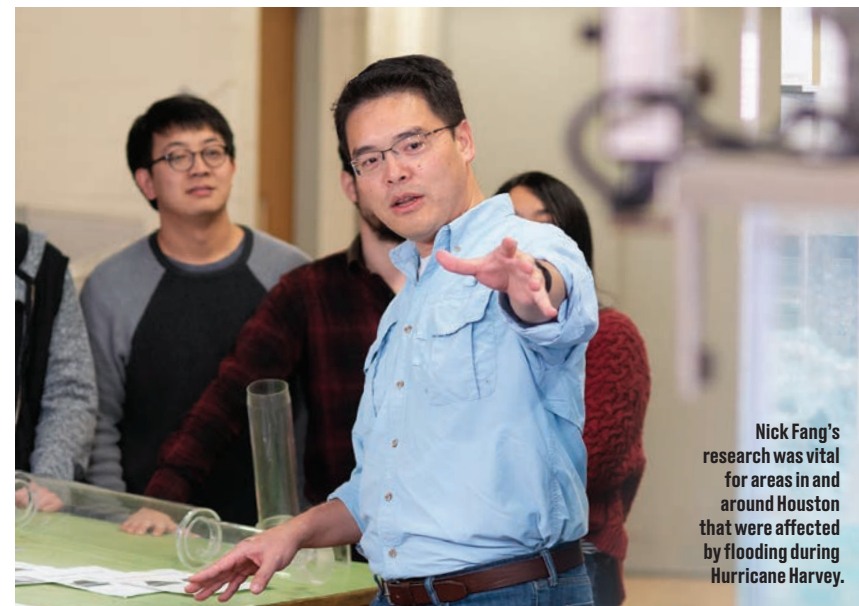
During Hurricane Harvey, Fang worked with researchers at Rice to help track and monitor the bayou's water levels, allowing TMC officials to make timely decisions about closing their flood gates, installed after Tropical Storm Allison, which caused \$2 billion in damage to the medical complex in 2001. TMC's proactive efforts during Harvey, aided by scientists such as Fang, allowed hospitals to stay open, serve patients, and minimize flooding.

The flood-alert system has also been adopted by the Texas Department of Transportation and the cities of Sugar Land and Grand Prairie. FAS4 is one of the "very few reliable operational systems in the nation," Fang says. "We're hoping a similar system can be applied to more flood-prone areas to benefit those communities."

During the hurricane, Fang also worked closely with a group of experts brought together by the Texas Division of Emergency Management and the U.S. Army Corps of Engineers, participating in a conference call every morning for the duration of the disaster. Utilizing radar rainfall data from the National Weather Service and a hydrologic model, Fang and his team created runoff predictions, then fed that information into a hydraulic model to create a series of floodplain maps of Harris County. This provided decision-makers with a better understanding of the situation on the ground, allowing them to see, for example, which areas vehicles would be able to pass through in order to provide emergency assistance.

Hurricane Harvey was not Houston's first experience with flooding, and likely not its last. Parts of the city were also underwater in 2015 and 2016, and "Harvey gave us another concerning data set," Fang says. He has been serving as a

"It's important for a city to get a handle on the debris volume so it can know how much money it has to invest in this kind of cleanup operation."



Nick Fang's research was vital for areas in and around Houston that were affected by flooding during Hurricane Harvey.

reviewer on the National Oceanic and Atmospheric Administration Atlas 14 project, which uses historical data to predict how much rain any given area might see in 24 hours during a 100-year, extreme precipitation event. Those estimates—which are now in the process of being raised for Houston—are important, affecting the building of homes and infrastructure like dams and levees. "They're going to change the way that people develop design criteria," Fang says.

LONG-TERM SOLUTIONS

Hurricane Harvey eventually moved out of the Lone Star State, but it left behind an estimated \$125 billion worth of damage, second only to Hurricane Katrina in the period of record, that would take time to clean up.

In the aftermath, several media outlets reported that experts were concerned that lingering debris could be hazardous to residents' health, bringing mold and mosquitos, among other things, to already hard-hit areas.

In October 2017, civil engineering doctoral student Surya Sarat Chandra Congress and Cody Lundberg, a research engineer at the UTA Research Institute, traveled to Beaumont. There, they worked closely with city officials and personnel from the emergency management office to collect data in order to develop a framework that better estimated the debris that remained on city streets, which could help municipalities improve future cleanup efforts.

With the support of a yearlong Rapid Response Research grant from the National Science Foundation, Lundberg, an FAA-certified pilot, conducted 15-minute unmanned aerial vehicle (UAV) flights to take overlapping photographs of 14 different debris piles at eight sites while Congress served as a visual observer. Anand Puppala, associate dean for research in the College of Engineering and principal investigator on the Beaumont project, provided guidance; Junzhou Huang, an associate professor in the Department of Computer Science and Engineering, was co-principal investigator.

At the same time, collaborators from Louisiana State University used a smartphone camera to capture images of the same stockpiles. Once back at UTA, Congress used photogrammetry to create highly accurate 3D models estimating the volume of each pile of trash.

"It's important for a city to get a handle on the debris volume so it can know how much money it has to invest in cleanup," Dr. Puppala says. "Otherwise, if more resources are needed, removal work could be delayed."

Puppala's team has built its expertise in this research area in part through its work with TxDOT. In an 18-month infrastructure-monitoring project that ended in April, they used UAV photographs to estimate the volume of homogeneous stockpiles of materials such as sand. However, Puppala notes that Beaumont's debris piles—composed of a mix of ruined personal items and furniture, building materials like sheetrock, and fallen tree limbs—were highly heterogeneous, com-

plicating the task of estimating them. The researchers will use landfill records provided by the city of Beaumont to validate their methodology and see how close their estimates were to the amount of debris that was actually picked up.

Accuracy is key, and the team has perfected its algorithm to a high degree. "Any time someone makes an error of a few cubic yards, multiply the number of stockpiles in front of every home by the number of subdivisions, and you're looking at a vast underestimation of the total," Puppala says.

The researchers say the step-by-step methodology they're developing for both drone-based and smartphone-based debris estimation could aid emergency officials after future disasters.

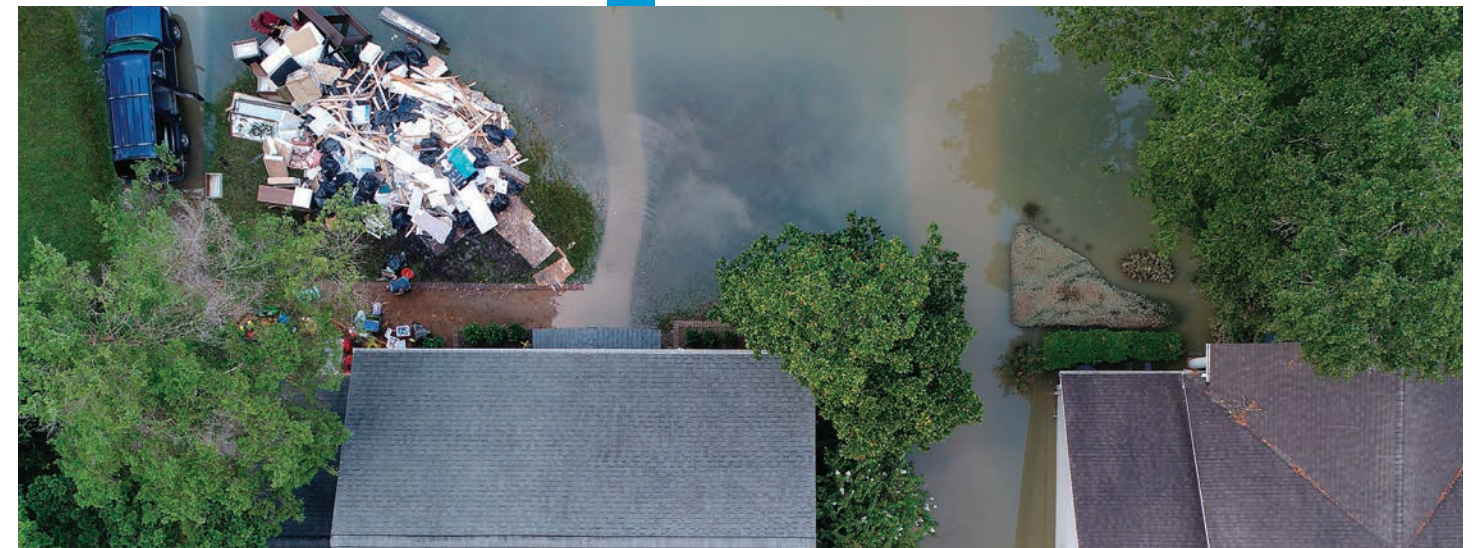
"Everyone has a drone nowadays and everyone can collect photos," Congress says, "but they need to know how to use the data effectively, which we're providing."

Puppala notes that UTA is a leader in UAV research, with multiple departments working on different applications. During Hurricane Harvey, Fang and his team,

Puppala's team has built up its expertise in this research area in part through its work with TxDOT.

in partnership with collaborators from Rice and Texas A&M University at Galveston, used UAVs to gather data on the state of coastal vegetation from Corpus Christi to Galveston, both before and after Harvey hit. That will enable them to see how the hurricane impacted coastal erosion. Meanwhile, Yan Wan, an associate professor in the Department of Electrical Engineering, is using a three-year, \$998,803 National Science Foundation grant to build a multi-drone networked aerial computer system that could provide real-time information during emergency operations.

While the 2018 hurricane season is well underway, experts are predicting a quieter period than the one that created Harvey. However, that doesn't indicate impact—it's unknown, of course, where storms will make landfall before they form. Whatever happens, UTA is ready to lend compassionate support and expert knowledge whenever help is needed. [UTA](#)



Anand Puppala (second from right) and students work with a TxDOT drone. The team used drones to survey debris after Hurricane Harvey.



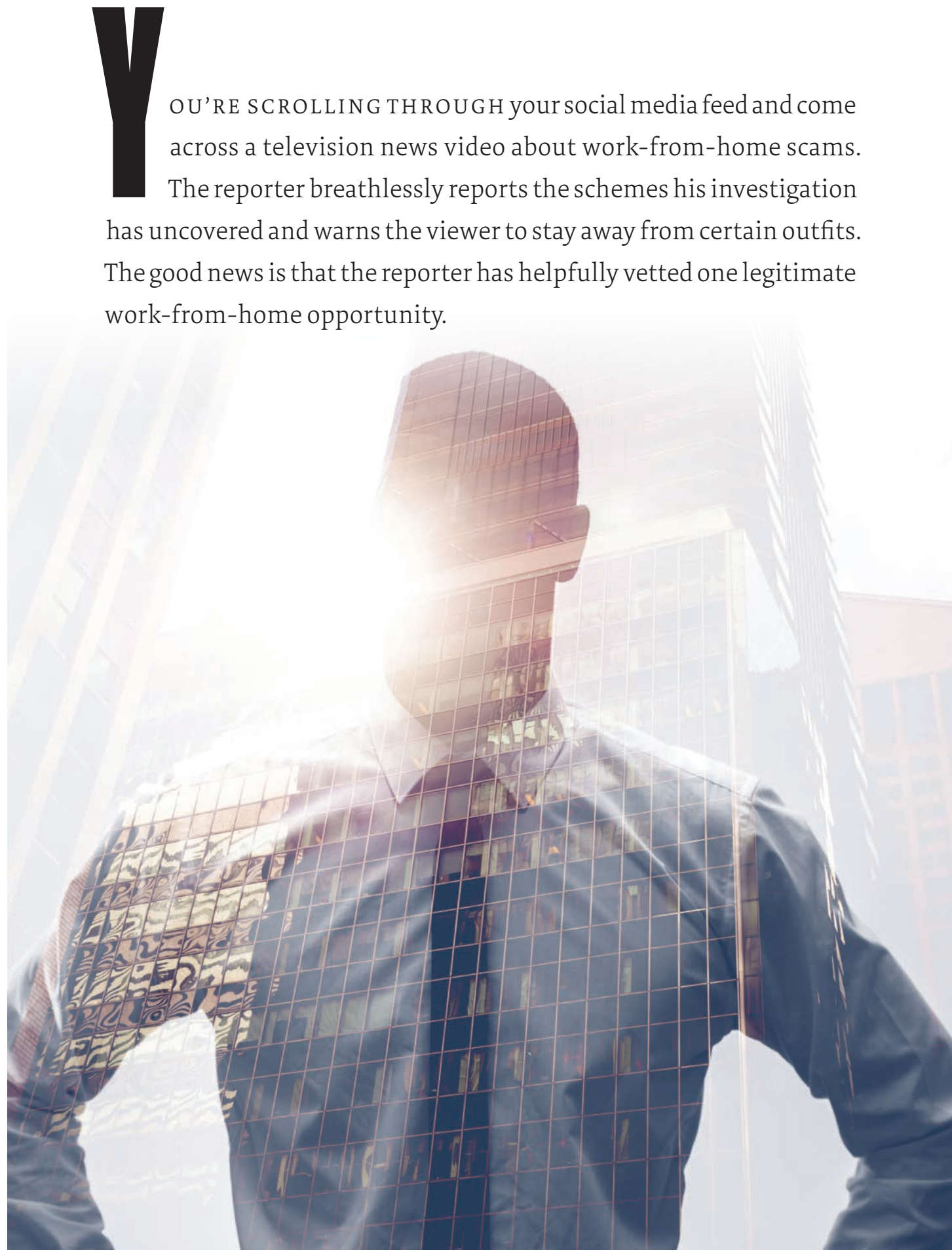
CYBER SUPERHEROES

Recognizing a growing need in Texas and beyond, UTA is working on all fronts to prevent cybersecurity breaches and protect data.

BY TONI COLEMAN



PHOTOGRAPH BY CJ BURTON



YOU'RE SCROLLING THROUGH your social media feed and come across a television news video about work-from-home scams. The reporter breathlessly reports the schemes his investigation has uncovered and warns the viewer to stay away from certain outfits. The good news is that the reporter has helpfully vetted one legitimate work-from-home opportunity.

The program that garnered the imposter reporter's seal of approval? It's a scam. You don't realize this until after you've racked up a couple hundred dollars in recurring credit card charges you agreed to when you purchased the starter kit, which contains bogus job leads.

"They've gotten good at playing into people's emotions and fears. We need to help law enforcement get a better grasp on this," says Kent Kerley, professor and chair of the Department of Criminology and Criminal Justice. The price of the starter kit is nominal, but if only 3 percent of targeted victims fall for the scheme, it adds up to a lot of money for the swindlers, says Dr. Kerley, who conducted a Google-funded study on work-from-home scams.

Cybercrime victimization is one of the areas Kerley plans to pursue as part of UTA's new multidisciplinary research and teaching cluster in cybersecurity and digital forensic investigation. In fall 2018, the colleges of Liberal Arts, Business, Science, and Engineering are joining forces to help close a skills gap as well as respond to industry demands for more qualified cybersecurity professionals. This enterprise to train future cybersecurity professionals is an extension of UTA's data-driven discovery initiative and joins ongoing University research on preventing cyber breaches and protecting data.

FUTURE CRIME FIGHTERS

Historically, the fight against cybercrime started in business schools in response to corporate need, with computer science or engineering researchers focusing on hardware and software solutions. But they have lacked deep forensic investigation tools, knowledge of statutes, and an understanding of victimization and criminology. Bringing these disciplines together makes for a more comprehensive and effective approach to fighting cybercrime, says Seungmug Lee, cybersecurity associate professor in the Criminology and Criminal Justice Department.

"Hackers or cybercrime offenders often go free. We do not see a lot of prosecutions," Dr. Lee says. "One of the biggest challenges is equipping security professionals with tools they need to do forensic investigations. Without proper knowledge of data science and law enforcement, we cannot approach

cybercrime cases properly."

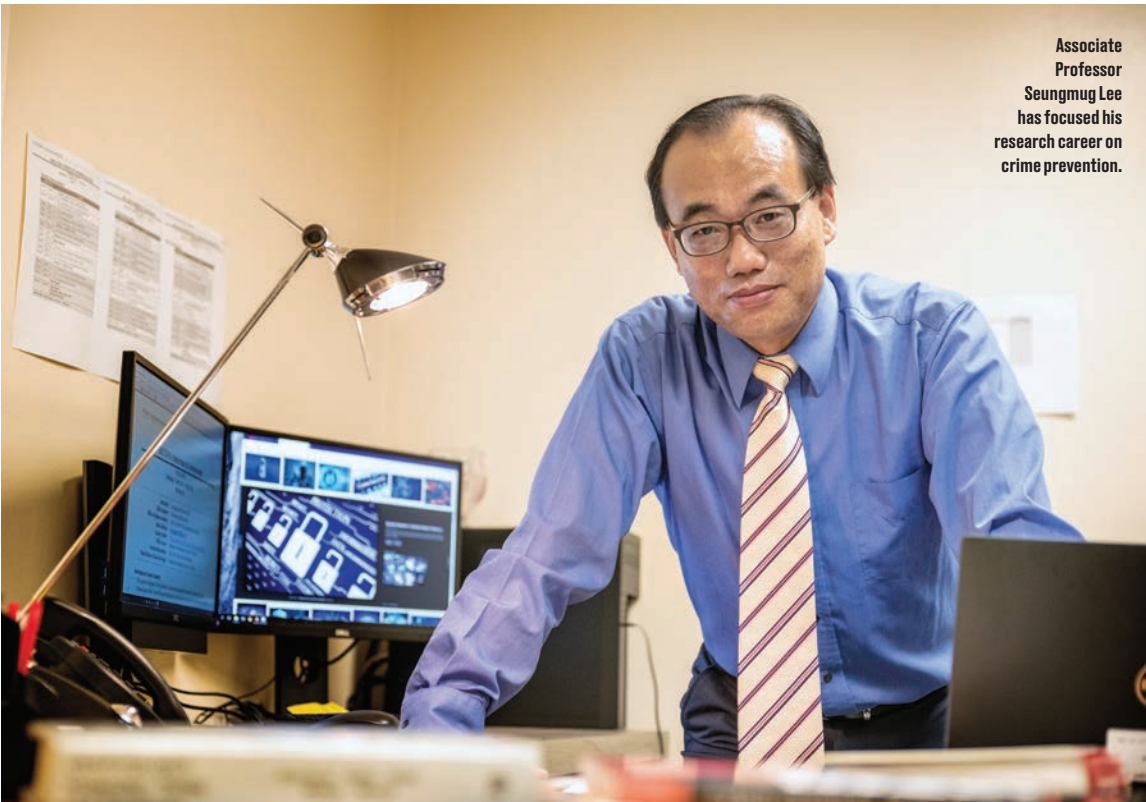
The FBI reports receiving nearly 300,000 complaints in 2016, from scams to data breaches to identity theft, with reported losses exceeding \$1.3 billion. The taskforce it created to work in partnership with local law enforcement agencies opened just 37 cybercriminal investigations that year. Since 2013, the group has launched 73 investigations.

The need for skilled cybercrime investigators is particularly acute in the Lone Star State. Texas ranks second among states for the most cybervictims and fourth in terms of the financial losses suffered. More than 21,000 Texans have reported cybercrimes, making the state second to California, where nearly 40,000 people have reported being victimized. The reported losses in Texas

total \$77.1 million, compared to \$255.2 million in California. However, the problem is likely more widespread than these numbers indicate because an estimated 85 percent of victims never report cybercrimes.

With the growth of cybercrimes, security professionals have not been able to keep up. A 2018 survey conducted by IT analysis and research firm ESG found that 51 percent

The need for skilled cybercrime investigators is particularly acute in the Lone Star State.



Associate Professor Seungmug Lee has focused his research career on crime prevention.

of cybersecurity professionals in North America and Europe think their companies have a “problematic shortage of cybersecurity skills.” ISACA, a nonprofit information security advocacy group, estimates a global shortage of 2 million cybersecurity professionals by 2019.

Cybersecurity shouldn’t “be limited to business schools or those with a computer science background. Security impacts all of us,” says Marc Johnson, chief security officer for a global IT company. He lauds UTA’s multidisciplinary approach, noting the importance of leveraging other degree programs to produce a well-rounded cybersecurity workforce.

“It’s a challenge to find people to fill these roles—with cybersecurity, it’s

“As researchers, we have to dream and conceive of attacks, find vulnerabilities, and not make technology so inaccessible that it is of no use to society.”

more than having knowledge from a technical perspective. You need people who are communicators,” Johnson adds. “We need people who can document chain of custody. We need people who are critical thinkers, have investigative training, can identify patterns, can read between the lines and figure out what’s going on, and can communicate risks in a language executives can understand.”

While planning for the cybersecurity teaching and research cluster is still in the early stages, Kerley expects that through the multidisciplinary enterprise, students will have an opportunity to earn either a certificate or a minor in cybersecurity. Joint criminology-computer science-business research projects are in the offering.

RESEARCH CRUSADERS

In the meantime, while UTA’s criminal justice program is teaching students how to investigate computer crimes and hold cybercriminals accountable, researchers in the Computer Science and Engineering Department are coming at cybersecurity from other angles.

“It’s a cat and mouse game,” says Gautam Das, the

Distinguished University Chair Professor of Computer Science and Engineering. “As researchers, we have to dream and conceive of attacks, find vulnerabilities, and not make technology so inaccessible that it is of no use to society.”

BETTER DETECTION

Christoph Csallner, associate professor of computer science and engineering, and Shabnam Aboughadareh (’15 PhD, Computer Science) created a code-monitoring tool called RAI to detect malware in legacy systems. Large companies find it more affordable to update and maintain (rather than replace) their legacy applications, especially if they spent millions developing them.

“Some programs have been running for decades,” Dr. Csallner notes. But these older programs are especially vulnerable to malware, furtive software designed to damage or disable computer systems. And taking a system offline to investigate or mitigate malware disrupts the business, affecting its bottom line.

Csallner and Dr. Aboughadareh created a tool that can be installed on a company’s main server and individual computers. The tool takes a snapshot of each computer’s memory, where malware typically hides, and sends the images back to the server. The central computer then compares the snapshots.

“It can detect which computers are not like the others,” Csallner says. “If there are a few outliers, you can assume a small set of machines has been taken over.”

Because of its small size, it succeeds where commercial antivirus programs, which take up a lot of memory, fail. Additionally, if malware is installed before the antivirus tool, the tool may think the virus is a normal part of the computer system. RAI is not susceptible to that problem.

“It’s common for malware to attack antivirus tools directly. That’s why it’s no longer best practice to install traditional antivirus,” Csallner says. “We don’t have that problem because the tool is small. We minimize the attack surface.”

FINDING VULNERABILITIES

Under certain circumstances, it is OK to release aggregate data but not individual data. For example, investigating the cause of an HIV cluster requires the release of the total number of diagnoses, but it’s unethical (and illegal) to reveal that John Smith, in particular, has HIV. Conversely, sometimes it’s OK to release individual data, but not aggregate data, such as how a user can search an online retailer’s database for a product to purchase, but it is unethical for a competitor to crawl or mine the data to gain a competitive advantage.

Data access control is the focus of research being conducted by Dr. Das. He is exploring how to restrict unauthorized access without making programs too cumbersome for the intended user. A major discovery he has made: vulnerabilities in location-based service

apps. Google Maps, Facebook, Instagram, and Waze are great for helping you get around or sharing your location with friends. But you’re also inadvertently sharing the location of those nearby.

“We have been able to decode aggregate information. Through sampling methods, I can get an idea of how many people are there in this neighborhood at this time,” Das says, noting that if he, as a third party, can figure it out, bad actors can, too.

LEARNING FROM INTRUDERS

Ransomware, which seizes control of an entity’s data and denies access until the company pays a ransom, can result in data becoming unrecoverable. That’s what happened in March 2018 in Atlanta, when malicious software shut down city services, preventing the city from collecting payments on water bills, accepting online job applications, and holding court proceedings.

In his research, Jiang Ming, assistant professor in computer science and engineering, is studying ransomware behavior and its evolution to develop ways to mitigate it without losing data. By monitoring how ran-

somware interacts with a computer’s file system, he’ll be able to characterize and model ransomware-like behaviors. By comparing progressive versions of ransomware through a method called “segment equivalence checking,” he’ll be able to identify semantic differences between ransomware variants. Although malware authors have been successful at evading software-based detection, malware usually leaves an identifiable footprint in hardware performance

“It’s a challenge to find people to fill these roles—with cybersecurity, it’s more than having knowledge from a technical perspective. You need people who are communicators.”

counters. Dr. Ming is investigating whether hardware can assist in early ransomware detection before any data is lost.

Collectively, the work UTA is doing to prevent, predict, and investigate threats will make an impact in disrupting cybercriminal enterprises that have cost billions in damages globally.

“Cybersecurity is a big area,” says Jingguo Wang, associate professor in the Department of Information Systems and Operations Management in the College of Business. Dr. Wang is conducting research on cybersecurity risks posed by employee behavior. “UTA has the opportunity to take a leading role in this aspect of education and research. There’s a high demand for skilled cybersecurity analysts and managers, and we should take this opportunity.” UTA




Clockwise from top: Jiang Ming, Christoph Csallner, and Gautam Das are just a few of the many experts working at UTA to combat cybercrime.




ALUMNI OF EXCELLENCE

MEMBERS OF THE UTA alumni family make up some of the most influential movers and shakers in North Texas. From entrepreneurial innovation to leadership in health care, these Mavericks have made UTA synonymous with excellence.


D CEO named 11 alumni to its 2018 list of the most powerful business leaders in North Texas.




LILLIE BIGGINS ('74)
President (ret.), Texas Health Harris Methodist Fort Worth




KEITH CARGILL ('81)
President and CEO, Texas Capital Bank




CHANDRA DHANDAPANI ('98)
Chief Digital and Chief Technology Officer, CBRE




ROBERT EARLEY ('09)
President and CEO, JPS Health Network




FRED PERPALL ('98)
CEO, The Beck Group




BETSY PRICE ('72)
Mayor, Fort Worth




KELVIN SELLERS ('98)
General Counsel and Director of Internal Audit, Interstate Batteries



ALLISON THOMPSON ('97)
Director of Economic Development, City of Cedar Hill



KELCY WARREN ('78)
Chairman and CEO, Energy Transfer Partners



ROYCE WEST ('79)
Managing Partner, West & Associates

Two UTA alumni have also been recognized by the *Dallas Business Journal*: **Shannon Carpenter Bearden** ('09), a senior design associate at Gensler, and **Neena Newberry** ('90), president of Newberry Executive Solutions.

In Fort Worth, several UTA alumni were honored by the *Fort Worth Business Press* as Health Care Heroes. **Biggins** received the 2018 Lifetime Achievement Award for her 45 years of service in health care. **Earley** was also recognized. Additional honorees included **B. Glen Whitley** ('76), a Fort Worth judge; **Tobi Jackson** ('92), a school board member; **James Petrovich** ('09), a faculty associ-

ate at Texas Christian University; **Ethel Tate** ('10), a registered nurse at Methodist Mansfield Medical Center; **Danella Thompson** ('14), a registered nurse at Medical City Fort Worth; and **Ignacio Nuñez** ('75), an OB-GYN at Texas Health Arlington Memorial Hospital.

Bruce Schultz ('97), CEO of Boardroom Salon for Men, also represented UTA in Fort Worth as an Entrepreneur of Excellence.

With more outstanding alumni entering the workforce each semester, the potential to make a transformational impact on the region has never been greater.

OUR LATEST ADDITION

All the latest professional updates from our talented alumni all over the world.

1936

Janita Hemphill Wells
(BS) was named a 2017 Each Moment Matters Honoree by the Presbyterian Communities and Service Foundation in Dallas, Texas. The awards program supports the Faith Presbyterian Hospice program in Dallas.

1963

Joe B. Swift
(BBA, Business Administration) was named a distinguished alumnus by North Dallas High School. At UTA, he was a member of the Sam Houston Rifle Team and was named a distinguished military graduate. He retired from the U.S. Army as a colonel in 1994 and from Bell Helicopter as a logistic engineer in 2004. He is a 2011 inductee into UTA's Military Science Hall of Honor.

1969

John S. Garth
(BS, Geology) retired as a field office geologist for the U.S. Department of the Interior Bureau of Land Management in southern Idaho. The Twin Falls, Idaho, resident previously worked as a petroleum geologist for Conoco, Tesoro Petroleum, and Bright & Company in Texas, Oklahoma, Louisiana onshore and offshore, and Alberta, Canada.

“UTA provided the foundation that I needed to improve my own life so that I can improve the lives of others. Maverick for life!”

— IDIONO EDEM ('11 BSN, NURSING)
Care Coordinator, Blue Cross Blue Shield of Texas

1972

James W. Trietsch
(BS, Mathematics) retired as executive director of operations, finance, and contracts from Abilene Christian University after 31 years.

1979

Steve Smith
(BBA, Management Information Systems) was named a sales associate with RE/MAX DFW Associates in Flower Mound, Texas. He is retired from Tarrant County, where he was chief information officer.

1981

Diana Ault
(BBA, Marketing) was elected to the board of directors of Hotel Brokers International and serves as board president. She is an associate broker with Scoggin Blue LLC, based in Las Cruces, New Mexico, and has managed the brokerage firm's Dallas office since 2002.

1983

Jean McSweeney
(MSN, Nursing) received the Women's Cardiovascular Health Professorship from the University of Arkansas for Medical Sciences, where she is associate dean for the College of Nursing Research and a professor of health behavior and health ed-

ucation in the College of Public Health.

1987

Mark Harris
(BS, Architecture), principal founder of markharris ARCHITECTS, has received three project awards from the 2017 Rethinking the Future Sustainability awards program that recognizes distinguished and innovative architecture, with specific emphasis on sustainable design. He had multiple projects featured at the 2018 Venice Architecture Biennale, the world's oldest international event for art and architecture.

1988

Susie Franscini Davis
(BBA, Marketing) has joined McBee, an independent health care services and consulting firm, as director for the south central United States.

1990

John Calhoun
(MCRP, City and Regional Planning) retired as a heritage planner for the city of Windsor, Ontario.

1991

Paul Henley
(BBA, Management) accepted the position of fire chief of Corsicana, Texas. He was battalion chief

for the city of Frisco and a captain for the Garland Fire Department.

1992

Margot Weyandt
(MSSW, Social Work) is the author of *My Shield and Portion Be*, the second in her Gour Ghost Passage series on Amazon. The Trego, Wisconsin, resident also paints the covers for her books.

1994

Joli Livaudais
(BS, '98 MS, Psychology), assistant professor of photography at the University of Arkansas at Little Rock, was featured with her artwork on lenscratch.com.

David Lubin
(BS, Interior Design) is co-managing director of IA Interior Architects in Dallas, Texas. Previously, he was an associate principal at HKS for corporate interior design.

1995

Tom Lindquist
(BBA Management) has been named CEO of

FILL US IN
You never call. You don't write. We miss you! Email us at classnotes@uta.edu and let us know what is keeping you so busy.

CLASS NOTES

Allina Health and Aetna Insurance Co. Previously, he served as president of Molina in South Carolina and as president of AccentCare in Texas.

Kamil Mufti (MS, Physics; MS, Mathematics) is the new imam at the Islamic Centre of Longview, Texas. He previously served as a resident scholar and imam at the Islamic Foundation of Peoria, in Illinois.

Karla Ramberger (BSN, Nursing) was named chief nursing officer of Las Vegas’ Sunrise Hospital and Health Care. Previously, she was chief nursing officer at Methodist Dallas Medical Center.

Jeff Russell (BS, History) was named Denton Independent School District director of student and campus support services. He is a

former principal of Decatur High School.

1996

Keith T. Walsh (BBA, Marketing) was named assistant general counsel and legal executive director of payment and technology programs for the New York City Taxi and Limousine Commission.

1997

Stephanie Lassanske (MSSW), a Tyler Junior College professor of social work and sociology, was appointed to the Social Work Field of Study Advisory Committee by the Texas Higher Education Coordinating Board.



ALUMNI CONNECTION

THROUGH BIMONTHLY Fort Worth Alumni Chapter meetings at Joe T. Garcia’s, area alumni are keeping their Maverick spirit strong. Pictured here are Michelle Clark (’97 MSSW) and Kim Crawford (’94 BBA, Accounting) at a recent get-together. If you want to join the Fort Worth chapter or learn how to start one in your area, contact Shaunda Poster, alumni relations coordinator, at shaunda@uta.edu.

1999

Rachel Lopez (MSSW) is the founder and president of the nonprofit Hispanic Forum of Mesquite. She is senior care manager with Broadspire and works and advocates for individuals with disabilities.

George Nnanna (MS, ’02 PhD, Mechanical Engineering) was selected as dean of the College of Engineering at the University of Texas of the Permian Basin. Previously, he taught at Purdue University Northwest in Westville, Indiana.

Chris Shao (PhD, Business Administration – Marketing) has been appointed dean of Tarleton State University’s College of Business Administration. He previously taught at UTA, Midwestern State University, and Southern Arkansas University.

2000

Mike Hamlin (BA, Criminal Justice) was named the new Grapevine police chief. He was assistant police chief and previously served 30 years with the North Richland Hills Police Department.

Sajeeb Wazed Joy (BS, Computer Engineering) is information and communications technology adviser to Bangladeshi President Sheikh Hasina.

“Love my alma mater. Thank you for broadening my world, for the support of UTA’s outstanding faculty, and for the privilege of teaching tomorrow’s communication leaders.”

—KAY PINKERTON
(’95 BA, COMMUNICATION;
'06 MA, MASS COMMUNICATION)
Founder and Strategic Consultant at Pinkerton Communications LLC

2002

Hernan Rizo (MBA, Business Administration) was named new chief financial officer for Green EnviroTech Holdings Corp. in Jamestown, California. Previously, he was CFO of The CFO Group and Tatum CFO Partners.

Janelle Shepard (BSN, Nursing) was appointed to the Texas Woman’s University Board of Regents by Gov. Greg Abbott. The Weatherford, Texas, resident is senior director of population health for Texas Health Resources. She has served on the Texas Higher Education Coordinating Board and the Texas Commission on Judicial Conduct.

2003

Charles Williams (MBA, Business Administration) has been appointed to a three-year term on the South Carolina Hospital Association Board of Trustees. He is president and CEO of the Regional Medical Center in Columbia, South Carolina. Previously, he served in health care administration at Tenet Healthcare Corp. in Dallas, Texas and JPS Health Network in Fort Worth, Texas.

2004

Heidi Allison (BAIS, Interdisciplinary

Studies), owner of Sugar Bee Sweets bakery in downtown Arlington, Texas, is a recipient of the 2018 Arlington Chamber of Commerce Small Business of the Year Award.

Jodi Vicars-Nance (MSSW, Social Work) is running for Denton City Council Place 5. She is the admissions and placement coordinator at the Denton State Supported Living Center, which is a large intermediate care facility for individuals with intellectual disabilities.

2005

Lock Khemkeo (MSSW, Social Work) was named executive director of Avalon Memory Care, a new community in McKinney, Texas. Previously, she worked at Grace Presbyterian Village, Premier Residences of Dallas, and Walnut Place.

2006

Hamad M. Hamad (BS, Biology) has been promoted to principal at Dallas, Texas-based law firm Caldwell Cassady & Curry. Since 2015, he has been honored as one of the state’s top young lawyers on the Texas Super Lawyers Rising Stars list by Thomson Reuters.

Michael Marquez (MS, Accounting) was named interim chief financial officer of Tearlab Corp. He previously

served as senior director of finance and director of financial planning and analysis at Tearlab.

2007

Leciana Gabor (MS, Educational Leadership and Policy Studies) has published a free ebook on smashbooks.com for elementary education teachers titled *Classroom Success Through Creativity*. She is a retired teacher and academic coordinator for Dallas Independent School District.

Patrick Lee (MPA, Accounting) was appointed vice president of strategy at Pharmacord. Previously, he led the product and business development efforts for CVS Health’s institutional pharmacy business and served as senior vice president of strategy and investor relations for Omnicare Inc.

2009

Shannon Carpenter Bearden (MArch, Architecture) was named to the *Dallas Business Journal*’s “40 Under 40” list.

2011

Felicia Bolton (BS, Broadcast Communication) was named a morning show anchor for WNCN CBS 17 in Raleigh, North Carolina. Previously,

“My education prepared me by helping me understand the core of motivation for individuals and adapt to changing priorities seamlessly without the audience seeing how hard you work for them.”

—KERRY KOVATCH
HORTON
(’06 BFA, THEATRE ARTS DESIGN) *Human Resources Manager at Summus Health Care*

she anchored the weekday morning news at WMC-TV, the NBC affiliate in Memphis, Tennessee.

Casey Crear (MPA, Public Administration) has been chosen as new performance auditor for Oregon’s Lane County.

Kevin Rubén Jacobs (MFA, Art), who successfully launched two art galleries in Berlin, was profiled in *D Magazine*’s February 2018 edition. Previously, he operated Olive Francis Gallery and was curator of The Goss-Michael Foundation in Dallas, Texas.

Michaela “Mickie” Watson (BSN, Nursing) was named a 2017 Each Moment Matters Honoree by the Presbyterian Communities and Service Foundation in Dallas, Texas. The awards program supports the Faith Presbyterian Hospice program in Dallas. Watson is the trauma program manager at Texas Health Resources.

2012

Baldwin Brown (MS, Educational Leadership and Policy Studies) was named inaugural principal at I.M. Terrell Academy for STEM and Visual & Performing Arts in Fort Worth. Most recently, he was principal of J. Martin Jacquet Middle School and part of the leadership team that opened the all-male P.L. Dunbar Young Men’s

Leadership Academy in 2012.

Clay Cody (MS, Educational Leadership and Policy Studies) has been named the new assistant athletic director for the Lewisville Independent School District. He had been the head coach for boys’ basketball and a social science teacher since 2012.

2013

Mark Bauer (BA, Journalism) rejoined American Lawyer Media as managing editor of *The National Law Journal* and *Texas Lawyer* in Washington, D.C. Previously, he worked with Active Network and ALM Media Properties LLC in Dallas, Texas.

Kevin Douglas (MBA, Business Administration) has joined Southern Shores Real Estate Group LLC as a sales agent based in the Summerville, South Carolina, office.

Steven Duong (MCRP, City and Regional Planning), an urban designer with AECOM, was given the Urban Pioneer Award by the Greater Dallas Planning Council.

Deval Pandya (MS, Aerospace Engineering; ’13 PhD, Mechanical Engineering), a data scientist in advanced analytics at Shell, has been selected to join the prestigious World Energy Council’s Future Energy Leaders program. He is a mentor

at the Houston Technology Center, a business accelerator that assists Houston-based emerging technology companies by providing in-depth business guidance, access to capital and professional services, and education.

Shivani Patel (BS, Aerospace Engineering), an engineering manager at Houston-based GoEngineer, explained how a light saber is ripped apart and what caused an explosion in the most recent *Star Wars* movie for *Design News*.

2014

Rebecca Cox (MPA, Public Administration) has been named the new executive director of CASA, or Court Appointed Special Advocates, of Denton County. Previously, she was the vice president of Metro Dallas Homeless Alliance, where she built collaborations between over 40 community programs to provide homes to homeless individuals, families, and unaccompanied youth.

Matthew McNeal (BS, Marketing), a singer-songwriter in Fort Worth, Texas, has released a new album, *Good Luck*.

Brandon Thurston (MS, Educational Leadership and Policy Studies) was hired as the new principal at Liberty-Eylau Elementary School in his hometown of Texarkana, Texas.

“My experience at UTA definitely has stayed with me and played a key role in my work.”

— BRENT WEATHERALL ('04 BS, COMPUTER SCIENCE AND ENGINEERING) *Software Engineer at Microsoft*

Jay Wilbanks (BS, Economics) has been named director of project management at National Roofing Partners.

2015

Hoger Villegas Gaona (BS, Aerospace Engineering), an airman first class, was accepted into the Air Force's officer training school and the pilot training program.

Paul J. Wilkerson (BSN, Nursing), a second lieutenant in the U.S. Army, is a heavy truck platoon leader with Avalanche Co., 725th Brigade Support Battalion, 4th Brigade, 25th Infantry. He is serving in Afghanistan.

2016

Peter Dean (EMBA, Asian Business Studies) was named special

project manager at Adolfson & Peterson Construction in Richardson, Texas.

Lisa Nguyen (MBA, Accounting) was selected as Top CEO of the Year for 2018 by the International Association of Top Professionals for her outstanding leadership and commitment to her industry. She is CEO of Unified Cosmetics, founder of Refined Spa and Beauty Bar, founder of LN Consulting Group LLC, a real estate investor, and owner of Hibachi 97.

2017

Bilal Caliskan (MCRP, City and Regional Planning) received a student project award from the Midwest Section Texas APA board. His thesis was “Factors Making a Street a Vibrant Place: Comparing Street Users’ Vibrancy Perception between Main Street, Fort Worth, Texas,

USA and Inonu Boulevard, Sivas, Turkey.”

Shatera Monroe-Robinson (MSSW) is a candidate running for the Jasper Independent School District Board of Trustees in Jasper, Texas. She is a service and transition coordinator for Burke, a comprehensive mental health and developmental disability service provider.

Kevin Park (BS, Architecture) was selected to participate in the American Institute of Architecture Students CRIT Scholar fellowship program. Recipients receive a grant for their research projects and are matched with a mentor conducting research at an architecture firm.

Thomas Wyatt (MBA, Accounting) has joined Tax & Business Services as a tax associate. He previously worked at JTaylor and Pier 1.

GRAND GESTURES

TRANSFORMATIONAL IMPACT

Donors make impactful gifts to support student success

S AVVY INVESTORS often make decisions based on a scale of return. The larger the return, the easier it is to dedicate financial resources to a specific investment.

But not all returns are measured in dollars. In fact, with record growth and rising research expenditures, UTA has established itself as a sound investment, both for its annual impact on the local and regional economy and for its focus on student success. Private philanthropists have realized that to drive the North Texas economy, investing in people and programs at UTA is a smart choice.

Three gifts over the past year have made a transformational impact in key areas. From scholarships for all majors to a unique, collaborative endowed chair, these gifts and the donors who made them create a rich learning environment that benefits the entire North Texas community.

Mike and Sunny Dolabi, owners of National Autobody Parts Warehouse in Grand Prairie, leveraged UTA's strengths in engineering and business to establish an endowed chair that combines resources from both fields. This unique research position will help businesses tackle major logistical issues by developing innovative best practices in business logistics, systems engineering, and supply chain and operations management.

Another chair, endowed by **Paul Andrews Jr.**, was recently established in the College of Engineering: the **Dr. Bob Woods Chair in Automotive Engineering**. For decades, Dr. Woods has driven the UTA Formula SAE racing team to global success. In addition to ranking as high as fifth internationally, the program has trained students to enter the highly competitive automotive engineering and design workplace and has a near-perfect job placement rate for all participating students.

Student success also lies at the heart of the University's fundraising efforts,



GIVE TODAY
If you are interested in getting involved at UTA through private philanthropy, contact Rose Youngblood, assistant vice president for university initiatives, at rose.youngblood@uta.edu or 817-272-6851. If you would like to make a gift of any amount, text GIVEUTA to 41444.

and that mission was made evident when **Raj ('93) and Mona Malik** created a permanent, \$500,000 endowed scholarship. The **Rajeev and Ritu Malik Endowed Scholarship for Student Success** will be used to support students from all majors, including international students. The scholarship acknowledges the role UTA played in helping Raj achieve success and adapt to a new country when he moved to the United States.

In the world of major gifts, UTA has built strong relationships with committed donors who want to make a difference. These gifts have not only set up a path for success for the University, but they are also establishing a culture of giving back that current students are beginning to recognize.

“Individual donors provide a growing amount of stability for a public university,” says Dee Robinson, vice president

for institutional advancement. “When a donor invests in our University and our students, we can begin to plan for the future and adapt quickly to the changing landscape of higher education. These gifts allow us to be ambitious and set high goals that benefit not just UTA, but our regional economy and industry.”

With such rapid growth at UTA, opportunities abound to foster an environment of success for talented students. The commitment of each of these donors is playing a major role in enriching our entire community by sparking new ideas that drive our economy and improve our quality of life.

“Individual donors provide a growing amount of stability for a public university.”

IN THE RUNNING

Two alumnae have made history as Dallas County sheriffs running for office this fall.



Lupe Valdez ('00 MA, Criminal Justice), Dallas County's first female

Hispanic sheriff, is running for governor of Texas. She faced Andrew White in the May runoff election and will be on the ballot against incumbent Gov. Greg Abbott in November.



Marian Brown ('87 BA, Communication) is Dallas County's first African-

American sheriff. She was appointed to be the interim sheriff after Valdez resigned to run for governor. Brown and Aaron Meek, a Republican, are on the November ballot for the position.

IN MEMORIAM

Gen. Richard E. Cavazos



(’49 BA, Liberal Arts) 88, *Oct. 29, 2017, San Antonio, Texas*. He was the U.S. Army’s first Hispanic brigadier general and four-star general. He received the Distinguished Service Cross for service in both Korea and Vietnam. Named a Distinguished Alumnus in 1975, Cavazos was among the first inductees into UTA’s Military Science Hall of Honor.

Suzanne Coleman



(’73 MS, Political Science) 70, *July 14, 2017, Austin, Texas*. She served as the late Texas Gov. Ann Richards’ chief speech writer for 36 years. A *Texas Monthly* profile of Coleman stated, “Together Coleman and Richards can turn everyday language into a knockout punch.”

ALUMNI

1950s

Jimmy Hill Blake
(’54 BS, Mechanical Engineering) 86, *Jan. 13, Woodinville, Washington*.

1960s

Richard Ray Walker
(’64 BS, Physics) 83, *July 8, 2017, Grapevine, Texas*.

Thomas “Tom” Charles Buie
(’65 BBA, Management) 87, *Sept. 13, 2017, Bedford, Texas*.

Joel Raleigh Kelley II
(’65 BA, Foreign Languages) 75, *Jan. 20, Houston, Texas*.

Michael John Bruckner
(’67 BBA, Finance) 75, *Feb. 4, Wichita Falls, Texas*.

Kenneth W. Hobbs
(’67 BA, English) 78, *Jan. 23, Fort Worth, Texas*.

1970s

Donald Gerald Jackson
(’70 BS, Physical Chemistry) 69, *Jan. 29, Burleson, Texas*.

David Thomas Mitchell
(’71 BS, Physics) 68, *Oct. 28, 2017, Arlington, Texas*.

Terry Kevin Twomey
(’71 BBA, Business Administration) 68, *Jan. 31, Kennedale, Texas*.

Janna Crawford Clarke
(’72 BA, Political Science) 67, *Sept. 30, 2017, Fredericksburg, Texas*.

Izak Donley Gregory
(’72 BA, Political Science) 77, *Jan. 24, Southlake, Texas*.

Ronald Wayne Overbeek
(’72 BS, Mathematics) 69, *Sept. 9, 2017, Granbury, Texas*.

Pauline Cave
(’73 BA, Sociology; ’75 MSSW, Social Work) 86, *Feb. 20, Weatherford, Texas*.

Randall “Randy” Hooser
(’73 BBA, Accounting) 73, *Jan. 7, Arlington, Texas*.

Wayne Glenn Harvey
(’74 BBA, Business Administration) 74, *Sept. 16, 2017, Arlington, Texas*.

Daurice Fae Bessire Ring
(’74 BSN; ’87 MSN, Nursing) 68, *March 7, Fort Worth, Texas*. She was part of UTA’s first class of family nurse practitioners.

Janice Ann Conant
(’76 MS, Microbiology) 72, *Sept. 29, 2017, Hurst, Texas*.

Douglas Joseph Jenkins
(’77 BS, Criminal Justice) 67, *Feb. 17, Fort Worth, Texas*.

David Arthur Bell
(’78 BS, Physics) 64, *Jan. 2, Friendswood, Texas*.

Rob Stearns
(’78 BS, Criminal Justice) 64, *Jan. 13, Portland, Oregon*.

Micheal Ray Midkiff
(’79 BS, Physical Education) 66, *Feb. 10, Arlington, Texas*. He played on the last Rebel football team in the 1960s.

1980s

Joe Barry Annino
(’80 BS, Physical Education) 61, *Feb. 27, Dallas, Texas*.

David A. Clark
(’80 BS, Architecture) 58, *June 27, 2017, Auburn, Washington*.

Barbara Barnes Crow
(’80 MBA, Business Administration) 77, *Feb. 3, Arlington, Texas*.

Noel Nieves Reyes
(’80 BS, Architecture) 67, *June 24, 2017, Arlington, Texas*.

Patricia “Pat” Nimmo Riddle
(’83 BA, Journalism) 90, *Jan. 5, Grapevine, Texas*. She graduated with honors at 54 and wrote for the *Star-Telegram* into her 80s.

Bob Lujano Sr.
(’86 BBA, Finance) 63, *Nov. 23, 2017, Grand Prairie, Texas*.

Lester G. McDougle
(’86 BS, Criminal Justice) 63, *July 27, 2017, Fort Worth, Texas*.

1990s

Carol Farmer McCorkle
(’93 BBA, Accounting) 76, *July 31, 2017, Irving, Texas*.

Leslie Hartzheim
(’94 MSN, Nursing) 57, *Oct. 1, 2017, Austin, Texas*.

Ayesha Leann Boykin
(’95 BBA) 44, *July 27, 2017, Fort Worth, Texas*.

Theodore M. Allen
(’99 BBA, Management) 76, *Sept. 12, 2017, Fort Worth, Texas*.

2000s

Carol Frances Vereen Beyer
(’02 MSW, Social Work) 76, *Oct. 6, 2017, Arlington, Texas*.

2010s

Cathy Sue Stenner
(’12 MPA, Public Administration) 61, *March 29, Houston, Texas*.

Jeffrey Ryan Cosby
(’14 BS, Computer Information Systems) 27, *Sept. 8, 2017, Frisco, Texas*.

Jorge Orlando Ventura
(’15 BBA, International Business) 23, *Aug. 29, 2017, Dallas, Texas*.

FACULTY & STAFF

Harry Rowland Barnard
82, *Feb. 25, Bynum, Texas*. He taught in the Mechanical and Aerospace Engineering Department from 2015-18.

Betty Sue Parker Carter
83, *Dec. 22, 2017, Arlington, Texas*. She worked in Health Services from 1971-96.

Wen-Sheng Chan
72, *Sept. 15, 2017, Arlington, Texas*. He taught in the Mechanical and Aerospace Engineering Department from 1986-2017.

Jack Fitzer
91, *Jan. 3, Eugene, Oregon*. Dr. Fitzer worked in the Department of Electrical Engineering from 1966-2001. He was a Professor Emeritus.

Kathryn A. Head
81, *Nov. 23, 2017, Flower Mound, Texas*. She worked for UTA in a variety of roles from 1977-2009, in Student Support Services, TRiO, and McNair Scholars.

Dorothy Estes

90, *Jan. 25, Arlington, Texas*. Estes was a passionate educator and student journalism advocate who served as director of Student Publications from 1970-96. In her career, she inspired generations of journalists who staff news outlets around the world. She was preceded in death by her husband, Emory Estes, who taught English at UTA.

Carla Diane Houx
66, *Jan. 10, Benbrook, Texas*. She taught in the Department of Management from 1998-2000.

Tom Kennedy
74, *Dec. 15, 2017, Arlington, Texas*. He worked in Computer Development and Training from 1971-2001.

Howard Lackman
90, *Nov. 26, 2017, Pantego, Texas*. He taught in the Department of History from 1955-95.

Johnny Dean Lasiter
56, *Dec. 2, 2017, North Richland Hills, Texas*. He worked in Housing Facilities Management from 2016-17.

Lawrence L. Schkade
87, *Nov. 25, 2017, Arlington, Texas*. He served as professor and dean in the College of Business during his 34 years (1969-2003) at the University.

Jere Dickson Turner
86, *March 7, Dallas, Texas*. He taught in the Department of Finance and Real Estate from 1989-2001.

Ann von der Heide
79, *Aug. 1, 2017, Arlington, Texas*. She worked in the Department of Industrial Engineering from 1976-98.

Rusty Ward
66, *Aug. 31, 2017, Arlington, Texas*. He served as vice president for business and controller from 1990-2010.

Hildegard Mary Williams
93, *March 18, Arlington, Texas*. She worked in Student Affairs from 1965-90.

James Allen Wood
85, *Jan. 24, Arlington, Texas*. He was a professor in the Department of Communication from 1989-94.



The Explainer



the redevelopment of cities and urban revitalization projects occur in inner urban areas and downtowns. A result has been the displacement of populations that are heavily dependent on transit to outer-urban areas with decreased transit availability. Often, little thought has been given to the fact that these shifted residents are being displaced to auto-oriented communities with minimal or nonexistent public transit.

These issues have a real impact on people's lives. An excerpt from my book, *Lost in the Transit Desert: Race, Transit Access, and Suburban Form*, gives a picture of how lives are impacted by living in environments with little or no frequent and reliable transit access:

Ms. Daigle, a native New Orleanian, who lives in a residential complex in New Orleans East, sits in her apartment and tells of the trials she faces getting to work using public transit.

"In 2005 I was staying in the East, and I had to walk from the I-10 Service Road to Lake Forest Blvd. in the dark. I had to come out from the Service Road to Lake Forest Blvd. at 11:00 p.m. at night, so I quit my job because it was too dangerous. After Katrina, I moved back in the East, and I have to walk again from the Service Road all the way to Lake Forest Blvd. I leave out of my house at 4:30 in the morning to catch the 5 a.m. bus, and that is dangerous. The bus picks me up about 5 a.m. I get to Canal Street at about 5:25 a.m. Then I have to wait on Canal Street for the Streetcar to go to the end of the line to get to my job."

Safety and the danger involved in waiting long hours for transit in the dark are recurring issues in Ms. Daigle's accounting.

Transit usefulness mostly lies in the design of the network, its response to urban form, and ridership demand. Transit technologies and systems should be selected for their ability to maximize the personal mobility of the entire community. They must become a necessary component of sustainable and equitable cities.

ABOUT THE AUTHOR



Diane Jones Allen has established a national reputation by bridging practice and research in transportation access, sustainability, and environmental justice. She has over 30 years' experience in successful practice and was recognized by the American Society of Landscape Architects for community service in 2016.

Lost in the Transit Desert

BY DIANE JONES ALLEN
Program Director of Landscape Architecture in the College of Architecture, Planning, and Public Affairs

ON A FRIDAY NIGHT, one of my students was hit by a car while riding her bike home from class. Fortunately, she walked away with just a few bruises. This incident was par for the course as we live in a city, Arlington, with no public transit and limited dedicated bike lanes. Those without automobiles are forced to take their chances in a car-oriented environment, where housing and services are spread far and little walkability exists.

Given the size of Arlington—its population is around 400,000—this lack of resources is quite unbelievable. Areas such as this can be described as transit deserts and result from the suburban and low-density built form that favors the automobile. These outer urban areas have not offered adequate public transit to support economically viable employment or access to social and cultural networks. Determinants of transit deserts include how far one must walk, the time it takes to access transit, and suburban physiographic conditions.

There are several reasons communities become transit deserts. They are often areas of low development with economic and demographic shifts. Currently,



Look Back 1983

Students celebrate their UTA pride during Homecoming 1983. On the wall behind them is Sam Maverick, the University's longest-running mascot. Sam, who became the official mascot in 1972, remained in place until 2007, when the student body decided

that Blaze would be a more inclusive figure. While UTA has seen many mascots over the years, the most unusual might be the Grubbworm—a moniker we held from 1917-21, which was derived from UTA's name at the time—Grubb's Vocational College.



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Homecoming is more than a single game—it's a week of spirit-filled events. Join the fun!

Look Ahead

.....
Your alma mater just can't get enough of you. Join us at any of these upcoming events. We can't wait to see you!
.....

SEPTEMBER 18

UTA Night at the Rangers

NOVEMBER 9

Distinguished Alumni Awards

OCTOBER 6

UTA Day at the Fort Worth Zoo

NOVEMBER 10

Homecoming

OCTOBER 21

UTA Day at FC Dallas

Dates subject to change. Visit uta.edu/events for the latest info.