BRAIN TRUST

How new clusters of research-intensive faculty—working on projects that have grand societal benefit—are elevating UTSA’s stature at a national level.

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CYBER SECURITY

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Big Dreams for UTSA

One short year ago I began my presidency at UTSA. All the promise and potential I saw from afar in this university has only become more palpable as I’ve gotten to know our students, faculty, staff, alumni, and many loyal supporters. The Roadrunner Nation is a powerful force!

All the impactful and compelling stories in this issue of Sombrilla Magazine speak to that force. In particular I note the passing of our dear friend Tom Frost. He was an immense advocate for UTSA.

I really do have the best job. Every day I get to work with many colleagues to envision where UTSA is headed and how we can make an even bigger impact on our city, state, nation, and the world. When I look ahead I see a UTSA with multiple campuses, more faculty, a larger graduate student population, and a research enterprise among the best in Texas.

Last fall we launched a strategic planning effort that sets some aggressive goals to bring UTSA to new levels of excellence in 10 years. Based on input from our many internal and external stakeholders, we’ve set our sights on two primary destinations.

First, UTSA will be a model for student success. UTSA has seen dramatic increases in student retention and graduation rates over the past decade, and we’re continuing the positive trajectory by actively cultivating an environment focused on their success. Second, UTSA will be a great public research university. A new initiative launched this fall puts UTSA on the fast track to attaining the nation’s highest research classifications, further solidifying our role as a magnet for economic development in San Antonio.

Realizing UTSA’s full potential as a university means opening our doors wider to serve more students. One of our major endeavors this year will be to create a campus master plan to ensure our infrastructure keeps pace with our growth. The plan will shape not only the university’s physical presence but also our integration with the city of San Antonio.

I regularly remind our students to dream big for themselves. As part of the Roadrunner Nation, join me in dreaming big for UTSA.

MARK MCCLENDON / UNIVERSITY COMMUNICATIONS AND MARKETING

Read about new athletics director Lisa Campos and her vision on page 26.
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SOMBRILLA MAGAZINE
DEPARTMENTS | FALL/WINTER 2018

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SHOWCASING ROADRUNNER PRIDE FROM SOCIAL MEDIA

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Who said [Kappa Delta Chi] penguins can’t spend a whole day in the sun!
#utsagreek
#gorunners

Lake Dive
@bixler_live4-photography:
Future football sensation
@fuentes517
just sending it with no fear!
#utsafootball

Even the Sun Sets
Orange and Blue
@noahdmoya:
Drift away.
#vacation
#cozumel
#utsa

About SOMBRILLA MAGAZINE

SOMBRILLA (SPANISH):
UMBRELLA
(SOHM–BREE–YAH)

Sombrilla Magazine is the official publication of The University of Texas at San Antonio. It is published three times a year and distributed without charge to students, faculty, staff, alumni, and friends of UTSA. The magazine strives to capture the intellectual, cultural, and social life of the university while tackling relevant global issues.

University Communications and Marketing produces Sombrilla Magazine and other publications that highlight the achievements and impact of Roadrunners throughout the world. The division is responsible for promoting the university’s mission of academic and research excellence.

What’s Out
Online games and quizzes that mine people’s personal data on social media and then sell it to agencies that target online users with misleading political ads.

What’s In
Games designed and created by the UTSA Center for Infrastructure Assurance and Security to teach middle school students about cybersecurity.
Project Cipher introduces students to the concept of cryptography by showing players techniques for encoding or decoding secret messages. Pyramid of Knowledge lets educators build quizzes within its interface. The online tool supports automated scoring, randomized answer positioning, and multiple choice.

CONTACT US
Are you interested in sending an update for Class Notes or sharing news with other Roadrunners? Send submissions to:

SOMBRILLA MAGAZINE
UNIVERSITY COMMUNICATIONS AND MARKETING
ONE UTSA CIRCLE
SAN ANTONIO, TX 78249-1644

Email SOMBRILLA@UTSA.EDU

To request to be removed from our mailing list, to receive the magazine’s digital issues only, or to update your mailing address information, use the same contact details.

FINGER ON THE PULSE
CONNECTING UTSA TO THE WORLD AROUND US

What’s Out
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VIEW EXTRAS IMMEDIATELY

When you see the Sombrilla Live icon next to an article, use your smartphone’s camera to scan the code and view additional articles, video, etc. Adjust your phone settings to allow your camera to scan codes. All iOS and most Android phones have the camera capability, or you can use a third party app or even some photo-based apps like Snapchat to scan.
Husband and wife research team Amar S. Bhalla and Ruyan Guo operate the UTSA laboratory where the world-record nanorobot was created.
Department of Electrical and Computer Engineering, the series of nanorobots (each so small that eight of them lined up would be about the width of a human hair) was created by Soutik Betal during his doctoral research in electrical engineering. The devices could one day lead to huge medical advancements. “In a nutshell,” Guo explains, “we have developed nanocomposite particles that can be remotely controlled by an electromagnetic field. They function like extremely tiny robots that interact with biological cells.”

The nanocomposites are made of two types of multifunctional oxide materials in a “core and shell” configuration. The core is magnetic; it changes “shape” in response to magnetic fields. The shell is ferroelectric; it converts pressure into electric potentials. The magneto-elasto-electric coupled effect in the nanocomposites acts as arms and legs that move the nanoparticle around to interact with targeted biological cells. The nanorobots can move cells to align with one another, push cells into different locations, and possibly be used to deliver medication into a cell.

The demonstration of the remotely controlled medical robot was performed in late 2016 by Betal, who was conducting doctoral dissertation research in Guo and Bhalla’s Multifunctional Electronics Materials and Devices Research Laboratory. While the fabrication of core-shell structured materials have been developed through international research exchanges with collaborators in Brazil, the team discovered—and Betal demonstrated—the nanocomposites produced permeable motion.

The nanocomposite research also benefited from transdisciplinary collaboration with UTSA faculty in the biomedical engineering department and the physics and astronomy department.

Recognition for the work began when a study was published early this year in Nature’s Scientific Reports. The Guinness World Records designation followed. The greatest rewards, however, may yet be ahead for the tiny robots.

“They leave room for much hope,” Guo says. “We believe cancerous cells may be specifically targeted for treatment eliminating the need for some chemotherapy treatments, and Alzheimer’s disease patients could possibly receive special treatments by aligning cells that have ceased to live in the brain. There is still much work to be done, but we are very happy for this recognition and the potential that lies ahead.”

It can’t be seen with a human eye. It doesn’t look anything like C-3PO or R2-D2 or even BB-8. Nevertheless, it is a robot (all 120 nanometers of it), and its creators at UTSA are now record holders in Guinness World Records for creating the Smallest Medical Robot. Under the guidance of professors Ruyan Guo and Amar S. Bhalla in the Multifunctional Electronics Materials and Devices Research Laboratory, the research team of electrical engineering students and two collaborators at the University of São Paulo in Brazil created the smallest medical robot. It can’t be seen with a human eye. It doesn’t look anything like C-3PO or R2-D2 or even BB-8. Nevertheless, it is a robot (all 120 nanometers of it), and its creators at UTSA are now record holders in Guinness World Records for creating the Smallest Medical Robot. Under the guidance of professors Ruyan Guo and Amar S. Bhalla in the Multifunctional Electronics Materials and Devices Research Laboratory, the research team of electrical engineering students and two collaborators at the University of São Paulo in Brazil created the smallest medical robot.

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The Paragalago cocos is one species among the new bush baby genus that Pozzi’s team identified. The team took measurements of 12 craniodental features (skull and teeth) from more than 600 galago specimens, including cranial height, palate width, snout length, mastoid length, and cheek teeth width. They found that the Paragalago cranium is more ovoid in shape, narrowing posteriorly, so that the mastoid bones (at the base of the skull) protrude. Premaxillaries (bones at the tip of the upper jaw) were shorter. Premolar-to molar size varied from that in the Galago genus. Additionally, the new genus has a shorter snout as well as having other skull and tooth variations.

UTSA IS RECOGNIZED AS ONE OF THE TOP YOUNG UNIVERSITIES GLOBALLY

BY COURTNEY CLEVenger

UTSA has again been recognized for excellence in academics and research. Times Higher Education released its annual Young University Rankings in June, placing UTSA among the top five universities under 50 years old in the United States and among the top 73 in the world. The 2018 rankings include 250 universities from 55 different countries and measure excellence in teaching, research, citations, international outlook, and industry income.

UTSA scored particularly strong in the citations category, which measured research influence by examining the number of times a university’s published research had been cited by scholars around the world. To develop the measurement, which accounted for 30% of the overall score, Times Higher Education reviewed the citations of more than 12.4 million journal articles, article reviews, conference proceedings, and books and book chapters published from 2012 to 2016.

UTSA also ranked high in research, which accounted for an additional 30% of the overall ranking. Over the past decade UTSA has expanded its research initiatives and created additional research opportunities for students by recruiting faculty members who are highly sought-after in their fields [see “Cluster Analysis” on page 20]. These researchers have joined UTSA from universities such as Harvard, Columbia, Georgia Institute of Technology, Johns Hopkins University, and Cairo University in Egypt.

Other UTSA strengths include international outlook (reflecting ability to attract students, faculty members, and research collaborators from around the world) and industry income (which measured UTSA’s commercialization activity, including innovations, inventions, and industry consultancies).

“It is an honor for UTSA to once again be recognized by Times Higher Education as a world-class discovery and knowledge enterprise,” President Taylor Eighmy says. “This ranking affirms UTSA’s commitment to taking on the grand challenges of our time and bringing impactful solutions to the world.”

Only five other U.S. universities made the 2018 Young University Rankings. They are University of Alabama at Birmingham (10), UT Dallas (31), George Mason University (tie 51), Rush University (tie 51), and Florida International University (99).

This is the sixth time that UTSA has been included in the Young University Rankings. The university also was included in 2012, 2013, 2014, 2016, and 2017. 

COURTESY OF LUCA POZZI

THE PARAGALAGO COCOS IS ONE SPECIES AMONG THE NEW BUSH BABY GENUS THAT POZZI’S TEAM IDENTIFIED.
Trying to spot a tiny ball of fur high in the treetops of the thick jungles of Tanzania and Kenya is another day on the job for evolutionary primatologist Luca Pozzi, an assistant professor in UTSA’s anthropology department. During one of his most research excursions, when he joined a team of researchers led by Judith Masters from the University of South Africa, that elusive ball of fur in question was the galago, also called a bush baby, a nocturnal, tree-dwelling primate of the genus *Galago* that’s native to Africa and closely related to a type of lemur. But Pozzi and his colleagues would make an electrifying discovery instead—a new genus of bush baby and multiple species. They named the new genus *Paragalago*. The team’s work has identified species of *Paragalago* in Kenya, Malawi, Mozambique, South Africa, Tanzania, and Zanzibar.

For Pozzi, understanding biodiversity among primates is key to conservation efforts. In fact, one of the reasons that Pozzi, originally from Italy, chose to teach and conduct research at UTSA is the anthropology department’s strong conservation focus. Here, he breaks down for Sombrilla Magazine what makes *Paragalago* an entirely different bush baby genus.

**BUDDING GENUS**

A CLOSE-UP LOOK AT ONE PROFESSOR’S DISCOVERY OF A NEW BUSH BABY

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**EVIDENCE**

Because of their nocturnal life and an inability to distinguish colors, vision is a poor way for bush babies to distinguish their trusted relatives, so they rely on bioacoustics (specific calls) to help them interact, produce warning cries, etc. Pozzi and the researchers worked with sonograms of existing bush baby vocalizations from museums in the U.S. and Europe and of ones they recorded in their research, and they found variations in aspects such as frequency level, syllables, tones, and clicks.

**EVIDENCE**

Scientists first noted anomalies in samples of mitochondrial DNA among dwarf galagos studied in the early 2000s, suggesting, as Pozzi notes, “there was something going on.” The team worked with specimens of galago held in museums in Europe and the United States to extract DNA, finding that although *Paragalago* are similar in size to dwarf galago, the difference in DNA clearly showed their new bush babies aren’t just small but completely different animals from galago.

**COMMON FEATURES OF ALL BUSH BABIES**

- Can weigh under three ounces and up to three pounds.
- Native to continental Africa’s western and central countries but have migrated to southeastern coastal nations as well.
- Eat insects, gum from trees consistently through the year. If in an unstable environment, tree gum is a good stable food.
- Feature large eyes (for night vision), long fingers and toes (for gripping limbs of the forest treetops they call home), large ears (for acute hearing to help track down insect meals in the dark), and long tails (to help them balance).
- Vocalize with loud calls to communicate with each other and send warnings, particularly with family members.

**BUDDING GENUS**

A CLOSE-UP LOOK AT ONE PROFESSOR’S DISCOVERY OF A NEW BUSH BABY
The Leadership Institute kicks off August 16 with leadership training. To currency and blockchain certificate programs and will range from three-hour education programs.

NERVES OF STEEL: The UTSA Steel Bridge Team competed in the 2018 National Student Steel Bridge Competition, winning the inaugural Frank J. Hatfield Ingenuity Award for unique bridge design. The team of 12 civil engineering students also placed fourth in construction speed.

LEAD THE WAY: The UTSA College of Business’s Center for Professional Excellence is launching a new series of executive education programs. They will range from three-hour workshops to 12-month certificate programs and include topics from crypocurrency and blockchain to leadership training. The Leadership Institute kicks off August 16 with coursework beginning the first week of September.

GUARDIANS OF THE ENERGY: To help safeguard the nation’s energy sector, UTSA and Idaho National Laboratory have signed an agreement to facilitate collaborative academic and research programs in cyber and critical infrastructure protection. The agreement will include increased internship and postdoctoral opportunities, and joint appointments of cyber-focused researchers, allowing UTSA faculty and INL staff to conduct collaborative research programs, with projects and personnel located on both the UTSA and INL campuses.

1604 SECONDS WITH...
MICROBIOLOGIST KARL KLOSE

GOING Viral

THE INFECTIOUS DISEASE SPECIALIST DISCUSSES HIS PODCAST TALKS WITH FELLOW EXPERTS

I realized what a great mechanism this is to communicate science and microbiology and to promote UTSA. We have our own weekly STCEID seminar series, which brings in experts in microbiology and infectious diseases from all over the country. A podcast based on discussions with these speakers would be a great way to promote the center, but I was slightly intimidated by the technology involved. Then we hired a technical support person in the biology department who was an expert in audio technology. She helped set up our podcast and took care of the technical aspects, which freed me to develop the content and promote the podcast series.

What do you like about doing a podcast? The neuroscience group in our biology department had started a podcast to promote discussions with the guests they were bringing to campus as part of their seminar series.

What made you think about doing a podcast? The neurobiology group in our biology department had started a podcast to promote discussions with the guests they were bringing to campus as part of their seminar series.

What do you like about doing the podcast format? The podcast allows for more in-depth information from recognized experts regarding a specific topic. The format is similar to listening to NPR when they interview an expert on their area of expertise. It’s a relaxed and informative discussion, and the guests are always happy to talk about what they have devoted their careers to studying. The podcasts are unscripted so they can meander to interesting and unexpected topics, which makes it more similar to a conversation.

Where do you find your guests? When we started the podcast we exclusively taped episodes with the guests who were on campus as part of our seminar series. However, this limited us to discussing only certain topics, and sometimes the topics became repetitive. We have since expanded to recording episodes with remote guests, which has dramatically expanded the types of topics we discuss. Because the time commitment for a remote guest is no more than one hour in their own office, we can record a podcast with people who couldn’t readily travel to UTSA. I usually read about an interesting scientific topic and then contact the scientists involved in these studies to ask if they would like to participate in a podcast. Generally, scientists are happy to discuss their areas of research interest.

For each episode you have a case study. How do you come up with those? I write the case studies. The idea behind case studies is to engage the listener with an entertaining scenario and to let them practice their medical skills by paying attention to the symptomology of infectious disease and the background history relevant to disease transmission. Case studies are one of the critical components of medical school education, because this is what physicians encounter when they practice medicine. Our case studies are meant to be able to be solved by most listeners and to be entertaining to all listeners.
Elephants are extremely intelligent, so we had to design hidden compartments and secret buttons to aid in the enrichment process.

The San Antonio Zoo’s elephants are getting their trunks on some cool new tools, thanks to innovative UTSA students. Out of more than a dozen enrichment devices proposed by freshmen in the Honors College’s 2017 product launch course, zoo officials selected three designs to be developed. To approach the challenge, students researched how elephants behave, interact, learn, and stay active.

“Elephants are extremely intelligent,” says Gold Hood, the mechanical engineering professor who taught the product course, “so we had to design hidden compartments and secret buttons to aid in the enrichment process.”

The three devices installed for the zoo’s elephants are:

- **Babe**: A concrete “tree” designed to shower the elephants as they hit it with their trunks. Students designed the tree, which will also spray zoo visitors with water, to look similar to those found in the elephants’ natural habitat.

- **Foobil**: A spinning mobile with modules that the elephants can hit to access hidden food.

- **Tire Tower**: Elephants will use their trunks to pull tires up and down. Designed like the classic children’s ring tower, it will allow the elephants to access food hidden inside the tires.

Katherine Wofford, a student in the course, says, “It feels great to be able to design something that hopefully helps these animals learn and live great lives. I’m excited to see how the elephants interact with the devices we created.”

The devices were installed in the zoo’s elephant habitat in the spring, and students will now be able to study their impact and how the elephants interact with them. Students will also collect data to measure how effective the exhibit additions are and how zoo visitors respond.

Honors College Dean Sean Kelly says the undergraduates who participated in the project enjoyed seeing their blueprints come to life and helping with the construction and installation of the three devices. “We want to provide as many ‘classroom to career’ learning opportunities as possible for our students, like this collaborative project with the San Antonio Zoo,” he says, “so that they learn the importance of showcasing their talents and how to solve challenges in our community.”
RISE AND SHINE: With a goal to assist under-represented students in attaining doctoral degrees in the biomedical and behavioral sciences, UTSA has received a five-year, $7.7 million grant to support the Research Initiative for Scientific Enhancement from the National Institutes of Health.

The RISE program is designed to ensure that talented and motivated minority or disadvantaged students are able to obtain the experience and skills they need to succeed in research-intensive careers.

Students in RISE pursue their own original research and present their findings at scientific conferences while they are enrolled at UTSA. That experience introduces them to a range of scientific disciplines and exposes them to networking opportunities with representatives of some of the nation’s top research universities.

“We are proud that the RISE program will continue to launch our undergraduate and Ph.D. students into high-level careers that improve the nation’s health, education, safety, and economy,” says Gail Taylor, assistant program director.

“As medicine continues to rapidly evolve,” says U.S. Rep. Joaquin Castro, “I’m glad to see San Antonio emerging as a leader in educational opportunities to create the next generation of medical professionals.”
A transdisciplinary collective of faculty and staff experts has founded the UTSA San Antonio Missions Research Consortium. The group is dedicated to the study, protection, and enhancement of the historic early 18th-century Spanish colonial sites. The San Antonio Missions National Historic Park was inscribed in 2015 as a UNESCO World Heritage Site.

The university’s Center for Cultural Sustainability, part of the College of Architecture, Construction and Planning, is leading the consortium in collaboration with other research centers, including the Center for Archaeological Research and the Institute for Economic Development.

“The future of the San Antonio missions is linked to the future of San Antonio and Texas,” says William Dupont, who is director of the Center for Cultural Sustainability and the San Antonio Conservation Society Endowed Professor in architecture. “UTSA faculty have been studying these missions and their communities for nearly as long as the university has existed. The university is home to a deep well of knowledge related to the missions that can strengthen understanding of their past to better manage their future. Academic research has an important role to play in fostering appropriate and sustainable growth respectful of our outstanding heritage.”

Collectively, UTSA faculty members have published more than 50 scholarly works and 20 research reports on the five Catholic missions. Additionally, several active research studies are in progress in such diverse fields as archaeology, architecture, public policy, tourism marketing, and art history. Consortium members collaborate with government agencies and nongovernmental organizations that manage or preserve the missions and the adjacent communities in a variety of ways, such as conducting research projects, leading preservation efforts, publishing educational materials, and serving as resources.

San Antonio and other organizations are creating city initiatives, new development, and policy to prepare for the expected influx of tourism and associated increase in revenue. And the UTSA-led consortium exists so that academic and scholarly research is a part of the ongoing dialogue about the missions’ future, according to John Murphy, dean of the College of Architecture, Construction and Planning and the Roland K. Blumberg Endowed Professor of Architecture. “UTSA has long had an interest as both an academic institution and as a neighbor in the growth and preservation of the San Antonio missions,” he says. “We all understand the importance of the missions, and we as scholars hope to aid in collaboration and research opportunities.”

Among the research underway at UTSA, Sedef Doğaner, an associate professor of historic preservation and chair of the Department of Architecture, is conducting a market assessment of heritage tourism potential and economic impact within a one-mile radius of missions San José and San Juan. The assessment is being sponsored by the City of San Antonio and led by UTSA’s Institute for Economic Development.

Additionally, Shelley Roff, an associate professor of architecture, is researching, analyzing, and cataloging the tools and materials used in the construction of Spanish colonial missions in Texas. In 2014 Dupont and a team of researchers provided a specialized curriculum about Spanish colonial ways for a demonstration farm at Mission San Juan.
In an effort to provide best practices for the long-term management of storm water in the Edwards Aquifer recharge zone across South Central Texas and to improve UTSA’s ability to remove pollutants from storm water runoff, the university is taking on a project to upgrade storm water management facilities on its Main Campus.

The university will use low impact development to treat runoff from 9½ acres of its rooftops and parking lots, reducing the amount of pollutants entering waterways around the campus. These surfaces often contain contaminants such as oil, bacteria, fertilizers, gasoline, and sediment. Heavy rains compound the impact, washing contaminants into the water supply. A three-year, $1.06 million grant through the City of San Antonio’s Edwards Aquifer Protection Program will help fund the project.

“When the Main Campus was constructed in the early 1970s it was designed to move storm water off site as quickly and efficiently as possible using the best practices in the industry at the time,” says Brian Laub, assistant professor of environmental science, who is leading the project with Janis Bush, professor and chair of UTSA’s environmental science and ecology department, and Mei Lani May, a senior environmental planner in the university’s facilities office.

When the campus first opened, storm water was conveyed away from the property through a system of storm drains and open swales that lead to Leon Creek. Modern development of the campus, however, necessitates a new approach. Drawing on the principles of low impact development, the university will use nature as a model to remove the pollutants from storm water at its source. Low-impact development features scattered throughout the site will conserve natural areas, maintain the natural flow of water wherever possible, capture water to let it seep slowly into the ground, and filter out contaminants as it recharges the Edwards Aquifer.

The university will retrofit rooftops from the Physical Education, Student Union, and H-E-B Student Union buildings and a portion of the sidewalks, streets, and parking lots in the area with water quality treatment. If the facilities prove successful, the project will serve as a model for designing other storm water projects throughout San Antonio and across the aquifer recharge zone.

The project will also provide UTSA’s science and engineering students with a classroom-to-career learning opportunity. Faculty and staff involved in the project will collaborate to provide an outdoor classroom that will provide education and academic research on low-impact development, benefiting Edwards Aquifer water quality by increasing the number of students studying water quality issues specific to the aquifer.
A new testing method could show quickly and accurately whether a person has been infected with harmful bacteria or other pathogens, according to a study from UTSA researchers. Additionally, this method could show the exact severity of infection.

Seeing a need for an easier and more rapid method of testing for infection, Waldemar Gorski, chair of the UTSA’s chemistry department, resolved to test an electrochemical approach. He sought out Stanton McHardy, a medicinal chemist, who is an associate professor of research in chemistry and director of the UTSA Center for Innovative Drug Discovery. Together, they created molecules that bind to leukocyte enzymes and produce an electrical current to signal the presence of an infection.

The most common method of testing for infection in medical facilities is a strip that turns a certain color when infected fluids come into contact with it. “The problem with this method is that it’s imprecise,” Gorski says. “The human eye is forced to judge the level of infection based on the hue and deepness of a color. It’s difficult to make an accurate call based on that.” Furthermore, roughly a third of samples cannot be tested because the fluids contain blood or are too opaque.

Other methods of testing include microbiology or examining body fluid samples under a microscope and counting white blood cells, also known as leukocytes, which are an indicator of an infection. However, these can be slow processes and require highly trained personnel.

The UTSA team’s new molecules are housed on a testing strip. After being in contact with infected bodily fluids, the strip is connected to a computer monitor that displays a clear range of electrochemical responses demonstrating the severity of an infection.

“The signs and symptoms [of illness] people demonstrate aren’t always reflective of the level of the infection they have,” McHardy says. “This method could very easily show just how serious an infection is and make diagnosis a much quicker process, possibly preventing a more serious illness.” Gorski believes the method could be especially useful to people who have just undergone surgery, since it could determine definitively whether they have an infection from the procedure before it worsens.
Slackers Welcome

There’s no surprise that students have returned to campus still wearing lightweight clothing and shorts. Yes, it might be a new fall semester at UTSA, but the heat isn’t behind us yet in South Texas. It’s a great time to catch people spending time outdoors, particularly those who are participating in any number of club and recreational sports.

One of the more intriguing activities is slacklining, which you can catch Andrew Lucas and other participants (who call themselves “slackers”) from the UTSA Slackers Association working at. Slacklining involves people working their way across a rope or ribbon-like expanse that’s generally stretched between two trees.

Luckily, they work only a few feet off the ground, so if you’re squeamish about heights, this could still be a sport for you.
President Eighmy welcomes Roadrunners with a “Bird’s up!” salute at the annual Howdy Rowdy Bash, one of the events rounding off Roadrunner Days, a nine-day celebration that welcomes ‘Runners to a new academic year. This year the bash moved from its usual home on Main Campus to Six Flags Fiesta Texas.

In an email message to students on their first day of class Eighmy shared a few words of wisdom to carry them into the semester: “Make the most of your time at UTSA. Your professors are rooting for you, and so am I. Be bold, think big, and dream on.”
In her studio space on the fourth floor of the Arts Building, graduate fine arts student Emily Verkamp '17 looks over some of her photographs, which have a “decaying” composition created by a unique chemical process. Each semester the Department of Art and Art History provides studio space to graduate students pursuing a master’s in fine arts so that they can fully focus on developing their bodies of work without interruption or having to pack up their tools and artwork in progress at the end of each day. Scan the Sombrilla Live icon with your smartphone’s camera or visit Sombrilla Magazine online to check out our photo essay on Verkamp and other M.F.A. students as they work in their studios and talk about their projects in painting, photography, sculpture, woodworking, and other mediums.
He’s Top Dog

Not long after his move to San Antonio last fall, this little guy started making regular appearances on our Main Campus. He was always accompanied, of course, by his dad, President Taylor Eighmy. Yes, this is Finbarr the First Dog. (You might’ve heard about him in our interview with Dr. Eighmy in Sombrilla Magazine last year.) Ever since he started visiting UTSA, the dachshund has become an appreciated break from busy schedules for students and any employee who is out and about campus.

So if you see this fella on a stroll through Sombrilla Plaza, don’t hesitate to stop for a belly rub or a chin wag. (Belly rubs are for Finbarr, naturally. The chats are good for both Finbarr and Dr. Eighmy, who appreciates attention from ‘Runners too.)
IN MEMORIAM

TOM C. FROST JR. | 1927–2018

UTSA lost a good friend with the passing on August 10 of Tom C. Frost Jr., a renowned business leader, philanthropist, and passionate advocate of the university. ¶ “Tom Frost made a lasting impact on San Antonio that will continue to be felt across our city for decades to come,” says
President Taylor Eighmy. “I am grateful for his loyal support of UTSA, and for his sincere interest in seeing our university excel for the benefit of the city. His leadership, vision, and passion for his work were remarkable—he was an inspiration to me and so many others.”

Frost’s belief in education as a catalyst to success was evident through his years of support of UTSA. His many notable contributions to the university included chairing the Development Board and serving as a leadership committee member for the university’s first capital campaign, which concluded in 2016 with more than $202 million raised to support scholarly efforts.

In 2013, Frost, along with Frost Bank, established a $1 million fund for the Frost Chair in Finance in the UTSA College of Business. The chair supports faculty excellence in research and teaching to develop the next generation of leaders in the financial industry.

In 2010, Frost and his wife, Pat, provided a $300,000 gift to support UTSA’s Generating Educational Excellence in Mathematics and Science program, which recruits and prepares science and math majors to become educators. The gift brought Frost’s overall commitment to the program to more than $1 million.

Since 1998, Frost Bank has partnered with the UTSA College of Business to host the Frost Distinguished Lecture Series. During its 30-year history, the lecture series has featured prominent business and community leaders who share their knowledge and experience with students.

“Tom Frost was a visionary who believed passionately in San Antonio, and he challenged all of us to be the best we can be,” said UTSA Vice President for External Relations Marjie French. “He stood with UTSA from the very beginning and was instrumental in helping to set the course of success we are on today. He was so dedicated to others and to the power of education to improve lives. He was the real deal.”

In recognition of his unwavering commitment, Frost was named an honorary life member of the UTSA Alumni Association and was the first non-UTSA alumnus to receive the Distinguished Service Award from the association.”

“I am grateful for his loyal support of UTSA, and for his sincere interest in seeing our university excel for the benefit of the city.

—PRESIDENT TAYLOR EIGHMY
“We are trying to model human brain disorders in a dish.”

—JENNY HSIEH, DIRECTOR OF THE UTSA BRAIN HEALTH CONSORTIUM
If she only had a brain—for research purposes, that is. But in lieu of experimenting on the body’s most complex organ, stem cell biologist Jenny Hsieh builds her own smaller and much less complex version in a petri dish. It’s called a cerebral organoid, and Hsieh has brought her cutting-edge laboratory to UTSA as one of the university’s newest brain health cluster hires. Hsieh joins the university as the Semmes Foundation Chair in Cell Biology after working with UT Southwestern Medical Center in Dallas, and she will lead the UTSA Brain Health Consortium. Her work is supported by a $2.7 million gift from the Robert J. Kleberg Jr. and Helen C. Kleberg Foundation and a $1 million gift from the Semmes Foundation.

“It’s really exciting,” Hsieh says about her research into epilepsy and the possibilities that await at UTSA. “We are trying to model human brain disorders in a dish. We’re collecting blood samples from patients who have our disease of interest; then we can use the blood sample and reprogram their cells to become what’s called a pluripotent stem cell, which is a stem cell that can become a brain cell or any cell in the body.” Hsieh is establishing a core facility at UTSA to do that type of reprogramming, and once the stem cell lines are made, they can be distributed to other researchers.

“Over the next 10 years we will develop these personalized screening models for genetic brain disorders to try and find or predict medicines that work better or medicines that are less toxic and that can help guide the medical community,” Hsieh says. “It’s like a diagnostic test.”

The growth of Hsieh’s lab over the next 10 years is a good example of how UTSA leadership wants to grow the entire university during that same time frame by expanding research opportunities for faculty and students and becoming a research enterprise among the best.

“We are building a density of talent at UTSA that’s two-pronged,” says President Taylor Eighmy. “First, we already have talented faculty and we need to help them to further develop professionally, especially as we think about our present and future areas of strength. Second, strategically hiring faculty who are leaders in their fields is one of the best ways we can rapidly differentiate ourselves as an institution and further build a nationally recognized research enterprise.”

“As a society, we are faced with many grand challenges such as how to live longer,
Building Clusters
THE FOCUS OF FACULTY HIRING

UTSA has been channeling its hiring of research-intensive faculty in these areas:

- Analytics and data science (2018)
- Artificial intelligence (begins in late 2018)
- Brain health (2017)
- Cybersecurity, including cloud computing (2017)

The cluster hires focus on research subjects that are well-thought-out. They are synergistic with our community. San Antonio wants them to happen.
healthier lives, prepare a workforce in the era of big data, and fuel economic development while stewarding our natural resources,” says Kimberly Andrews Espy, provost and vice president for academic affairs. “Addressing these challenges requires a collaborative effort where experts with different disciplinary backgrounds and approaches come together and develop new ideas and innovative solutions.”

“Cluster hiring is about accelerating these transdisciplinary efforts by hiring faculty who by design connect with colleagues in other areas and methods in order to do cutting-edge research and to engage our students with the latest information in the classroom,” Espy adds. “It’s a way to jump-start collaborations in more intentional ways, while still supporting the creativity and disciplinary methodology of individual faculty to enhance the quality of our institution and the success of our students.”

ATTRACTING THE BEST

Hsieh is just one example of the caliber of faculty being wooed by UTSA’s continued and aggressive focus to join the ranks of the country’s most elite research universities. Specific faculty in targeted clusters have been added throughout the university since 2016. These hires are in the university’s areas of research excellence: cybersecurity/cloud computing, analytics and data science, and brain health.

They join UTSA for a variety of reasons. Murtaza Jadiwala, hired in the spring as an assistant professor in computer science, says, “What attracted me most to UTSA was the enthusiasm and push I saw on campus toward achieving top research status. I really liked the university’s model of targeting critical growth areas, such as cybersecurity, toward achieving this goal. Moreover, the presence of prominent researchers at UTSA, such as Dr. Ravi Sandhu and Dr. Shouhuai Xu, who are already doing ground-breaking research in cybersecurity as well as state-of-the-art resources and research facilities (for example, ICS and CIAS) further attracted me. UTSA has a great mix of excellent faculty, students, and research infrastructure to become a research powerhouse in this nationally critical area of cybersecurity, which made my decision to join UTSA as a cybersecurity faculty and researcher easy. Last, but not the least, my wife and I love the city of San Antonio and all that it has to offer, and we could not think of a better place to raise our 7-year old daughter.”

Yeonjoo Park, hired this fall as an assistant professor in the Department of Management Science and Statistics says she was attracted to UTSA’s diverse, multicultural environment. She has enjoyed how pleasant and kind the people are at UTSA.

Anthony Rios, an assistant professor in the Department of Information Systems and Cybersecurity, also hired this fall, says, “I decided to come to UTSA because it is one of the top universities under 50 years old that provides an environment for research excellence. Likewise, given the growth rate of the university, it offers me an exciting opportunity to have a substantial impact on its future.”

STRIVING TOWARD A GOAL

The hires come as the university’s total research and development expenditures have reached $68.1 million during fiscal year 2017, an increase of 19.9% over the prior year. They also provide a foundation that aligns with Eighmy’s goals that will see UTSA entering a higher echelon. These goals include being recognized as an R1 Carnegie classification—designated as a nationally competitive research university.

The Carnegie Commission on Higher Education developed what has become the leading framework for classifying universities, based on research and policy analysis. The R1 classification is the highest level of research university and includes Brown, Cornell, Texas Tech, Texas A&M, and UT Austin.

UTSA also is well positioned to gain access to the National University Research Fund, money designated by the Texas Legislature to attract leading scholars to state universities. To help shepherd the university through the process, Bernard Arulanan dam leads the newly launched Presidential Initiative on Research Excellence. Arulan dam is UTSA’s interim vice president for research, economic development, and knowledge enterprise as well as the Jane and Roland Blumberg Professor in Bioscience.

“We now have a critical mass of research-intensive faculty who work in areas that have societal benefits,” Arulanan dam said. “We want to effect positive change in the community and beyond.”

AN IMPRESSIVE TEAM

UTSA has been laying the foundation for cluster hiring. Arulanan dam adds, citing the building of partnerships and collaborations with other universities along with the private and public sector, such as the San Antonio Life Sciences Institute. SALS I is a long-established research partnership between UTSA and The UT Health Science Center at San Antonio. It shows how both universities have been collaborating and growing their brain research capabilities with each other in mind.

“Our core research mission is to integrate research and clinical care to advance discoveries that impact human health and address the welfare of our entire community,” says Andrea Giuffrida, vice president for research at UT Health San Antonio. “Our collaborative initiatives with UTSA, through SALS I funding, spur the development of new strategic directions in biomedicine and the expansion of our research infrastructure to achieve our mutual goal of positioning Texas as a national research leader.”

This year the two SALS I projects to each receive the $100,000 award bring teams together to tackle substance abuse and prevention through novel solutions. UTSA biology professor Matt Wanat, along with UT Health San Antonio professor James Lechleiter, will look at how certain brain cells that regulate the transmission of electrical impulses could be targeted to help reduce a person’s cocaine use.

For the second project, UTSA’s Hsieh is working with Daniel Lodge, associate professor of pharmacology at UT Health, to use organoids to model addiction-related brain dysfunction. Organoids possess certain features of a human brain in the first trimester of fetal development, allowing researchers to explore how neurons grow and function. The combination of Hsieh’s expertise in stem cell biology and the developing brain and Lodge’s research on drug-addiction pathways offers a unique opportunity to address the impact of opioids and FDA-approved treatments on pregnant women. “Our partnership is synergistic,” Hsieh says, “and utilizes our unique expertise in these different areas to address the effects of drugs, especially during the development of the brain.”

UTSA has long pursued excellence in the study of the brain through its existing Neurosciences Institute, which has more than two dozen active primary investigators with research teams focused on understanding the basic development and functions of the brain.
New assistant professor of biology Lindsey Macpherson will continue that trend as one of several who joined the brain health cluster in the 2017-2018 academic year. Macpherson specializes in sensory neuroscience, especially chemosensation, which is a person’s ability to detect chemicals in the environment. She and her students are researching the sense of taste and the molecules, cells and circuits involved in communication between the tongue, stomach, and brain.

“So many basic questions remain about how we detect and process sensory information,” Macpherson says. “Years of evolution have produced highly sensitive and sophisticated systems to inform us if a potential food is nutritious or toxic. My job as a researcher is to determine how that works. My approach is similar to that of a mechanic-in-training: get a flashlight, observe what’s going on, tinker with it, remove or modify a piece and see what happens to the machine, and eventually use what I’ve learned to predict the function and connections between each piece.”

TRAINING PROFESSIONALS

Other relationships, such as those developed with Rackspace and the 80/20 Foundation have funded UTSA endowed professorships in cloud computing. UTSA’s multidisciplinary focus in cloud and cybersecurity helped faculty from the College of Engineering, the College of Education and Human Development, and the College of Business secure a five-year, $5 million grant from the National Science Foundation.

Led by Ravi Sandhu, the Lutcher Brown Endowed Professor of computer science and founding executive director of the UTSA Institute for Cyber Security, the project creates the Center for Security and Privacy Enhanced Cloud Computing, which acts as a pipeline to create well-trained professionals in the industry and strengthen San Antonio as a cybersecurity hub.

Jeff Prevost, engineering professor and assistant director of the Open Cloud Institute, works on the projects and says UTSA students benefit from the hands-on research focus that comes with stronger faculty as does the entire city.

“In order to have research credibility we need to accelerate our research claim at a national level,” Prevost says. “The cluster hires focus on research subjects that are well-thought-out. They are synergistic with our community; San Antonio wants them to happen. And it adds to our own momentum. It’s a great strategy that will make UTSA a stronger player nationally.”

Prevost says the cluster hiring will also help students who want to go from undergraduate to graduate programs and expand the areas in which students will have research opportunities. “Any area that is advancing—that we see new things that are coming out—it’s going to be really hard for faculty to bring that into the classroom unless they are involved with it on the research side. The benefits students receive are direct exposure and teamwork with the people doing the research. My undergraduates get to team up with graduates. The graduate students get to guide the undergrads on their path. The graduate students get a chance to be leaders—see what it means to manage people. And undergrads get exposure in areas—as juniors and sometimes sophomores—that they would have had to wait for. The feedback I get is that they all love it.”

MOVING IT ALL FORWARD

Attracting faculty from top research universities to come work at UTSA, will in turn help attract and retain star students. More than 70% of the hires for the analytics and data science cluster come from the highest tier of research universities like Harvard, Purdue, and University of Oregon.

“Given the complementary nature of cybersecurity and data analytics, we’ve built UTSA’s number-one ranking in cybersecurity to recruit elite faculty members in analytics,” says William Gerard Sanders, dean and Bodenstedt Chair in the College of Business. “Our deep base of data analytics faculty includes researchers who have won national analytics competitions and led data analytics programs. We’re positioning the college to be an internationally prominent player in the business of big data.”

The cluster will look at the significant societal questions raised by the trove of data collected in this modern age. Transdisciplinary approaches to data science will examine areas like privacy, ethics, policy, and global security. These important and timely questions tie into UTSA’s established areas of research excellence and the new highly interdisciplinary master’s degree program in data analytics.

“Cluster hiring is one of our means to build national prominence but it’s also a fertile training ground for students,” Arulanandam says. “By doing this we enhance and build true partnerships with the federal and private sectors. The embedded faculty become very entrepreneurial and that extends to our students. I would love to see our students become the next Bill Gates in whatever field they have chosen to study.”

In discussing future cluster hiring, Espy says, “The next cluster round we’re searching for beginning this fall is in artificial intelligence. This topic may sound “super-science,” however, here at UTSA, cyber methods like AI define our overall academic approach. Therefore, for our cluster hiring in artificial intelligence, we’re talking not only about the algorithms a computer scientist or mathematician might use or derive but also their application across a variety of contexts. In this way we connect basic, applied, and translational efforts. Under my tenure we will use a broad vetting process to select the different cluster topic each year.”
Students come first. Everything we do should be about supporting our students and their success. We’re fortunate to have so many talented students whose whole world is being transformed by their UTSA experience.

What has surprised you the most about UTSA? This is not a surprise, but what’s striking is how friendly everyone is—in a really genuine way. Everyone is so open and welcoming. That’s special and not true everywhere.

What is your best piece of advice for students? Work hard and make sure to take advantage of all the out-of-classroom experiences. Meet new people who aren’t like yourself, and get involved in something you never thought you would like. So go to a football game, even if your inclination is to spend all your time in the art studio or in the lab. You may discover interests and talents you didn’t know you had, and you may learn something about how the world works. College is the time to embrace life.

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San Antonio embraces the Roadrunners as its hometown team, but new athletics director Lisa Campos knows she can overcome hurdles to make the bond even stronger.

By Shea Conner

College athletics directors often throw around the same talking points when explaining why they accepted a new job: “growth” or “opportunity” or “potential.” While Lisa Campos has already used such terms as UTSA’s new athletics director and vice president for intercollegiate athletics, her journey to San Antonio was motivated by something much more personal than a few buzzwords. Raised in Las Animas, Colorado, Campos earned her bachelor’s degree at Colorado State University before pursuing a doctorate in education, educational leadership, and administration at The University of Texas at El Paso. Campos is a first-generation college graduate and says she saw herself in many of the young faces she encountered as she toured the campus at UTSA, a proud Hispanic-majority institution that also enrolls about 14,000 first-generation students. “That vision really aligns with who I am,” says Campos, who served as the VP for intercollegiate athletics at Northern Arizona University from 2012 to 2017 and as senior associate athletics director at UTEP from 2006 to 2012.

While UTSA was a perfect fit for her personality, Campos says she quickly made it clear she was an outstanding fit for the university. She hit the ground running the weekend her hiring was announced in November 2017, meeting with influential San Antonio business leaders and attending the UTSA-Marshall football game. She chatted with blue-and-orange–clad supporters at the Alamodome, posed for every photo request with tailgaters, and went out of her way to high-five El Gran Beak (the die-hard ’Runner fan who...
Athletics Director Lisa Campos, photographed at the Park West Athletics Campus, says UTSA’s vision aligns with her own experiences.
ATHLETICS

dresses in colorful luchador Mexican wrestling garb) before the opening coin toss.

Campos says that uniting the community through UTSA athletics—particularly through better student engagement—will be a primary focus for her department going forward. While she has been impressed with the passion of UTSA fans and the presence of the Roadrunner brand on campus, Campos envisions frequent, lasting interactions between student-athletes and San Antonio families as well as more students in the stands at athletics events.

“I imagine this athletics department being the fabric of the undergraduate experience,” she says. “Athletics can be such a great partner for the rest of the institution because it provides so many of the memorable out-of-classroom experiences that people think of when they reflect on their time in college.”

A WIN-WIN

Realistically, the most significant impact will come from an emergent football program hoping to build off two consecutive six-win seasons. “Close your eyes and imagine a sold-out Alamodome six games a year,” she says. “Imagine what that would do for the economy, the university, and the local businesses. Imagine the trickle-down effect to UTSA’s other sports. It’s a win for everybody when we support this hometown football program.”

UTSA football’s stock continues to tick upward. The Roadrunners notched their first ever victory against a Power Five team (Baylor) last season and ranked second in Conference USA in average home game attendance despite the cancellation of the highly anticipated home opener against Houston. Most notably, UTSA’s Marcus Davenport ’17 was named Conference USA Defensive Player of the Year and was chosen by the New Orleans Saints in the first round of the 2018 NFL draft. Throughout the draft process—from the Senior Bowl and the NFL combine to UTSA’s Pro Day and the draft itself—Davenport and UTSA notched approximately 1 billion impressions through television, radio, and print media. Between the national media coverage and representatives from all 32 NFL teams stepping foot on campus, UTSA football’s visibility and reputation are greater than ever before.

“What he did for this university was unbelievable,” Campos says of Davenport. “That is branding and publicity that you can’t pay for, and it came through one individual who played football. When you hear Dr. Eighmy talk about athletics as the front porch of the university, that was proved through the exposure that Marcus gave UTSA at the NFL draft.”

THE NEXT LEVEL

While Campos will do everything in her power to help the football program reach unheralded benchmarks, such as a bowl game victory and a Conference USA championship, she also recognizes that too few eyeballs in the area are fixed on UTSA’s additional sports. Campos oversees 17 athletics programs in her new post, including a women’s golf team that recently won UTSA’s first conference title in her tenure and a men’s basketball program poised for a breakthrough season under the direction of 2018 Conference USA Coach of the Year Steve Henson. Campos acted quickly to give Henson a raise and a contract extension through 2024 after the team’s first 20-win season since 2011 (and only the second since 1992).

Although the commitment to Henson was crucial, she acknowledges that facilities upgrades could take the men’s basketball team and many other programs to the next level. “From a fan’s experience, a coach’s experience, a recruit’s experience, and a student-athlete’s experience, we need some major upgrades in a lot of these facilities,” she says. The baseball and softball fields earn their fair share of gripes, but much of the ire she’s heard has been directed at the Convocation Center. Campos has already fielded a number of complaints about the outdated arena—from the difficulties of scheduling staggered practices for men’s basketball, women’s basketball, and volleyball to the frustration that UTSA can’t host doubleheader basketball events because the venue has only one home and one visiting team locker room that both genders can’t occupy in the same time frame.

Funding and constructing a modern-day basketball arena is “definitely top of mind for a lot of individuals” involved with UTSA athletics, Campos says. “There have been a lot of different conversations about partnerships—whether it’s with the city, the school districts, or private partnerships—to build a new facility. We are definitely keeping all options on the table. We are definitely keeping all options on the table. We are definitely keeping all options on the table. We are definitely keeping all options on the table. We are definitely keeping all options on the table. We are definitely keeping all options on the table.”

“Athletics can be such a great partner for the rest of the institution because it provides so many of the memorable out-of-classroom experiences that people think of when they reflect on their time in college.”

Marcus Davenport as he arrives for the 2018 NFL draft in Arlington in April. The ‘Runner was picked up during the first round by the New Orleans Saints.

A. President Eighmy introduces Campos at the press conference announcing her selection as athletics director.
The Year Ahead
NEW FACES AND PROMISING PERFORMANCES PROPEL UTSA'S ATHLETICS PROGRAMS FORWARD

BY SHEA CONNER

While Athletics Director Lisa Campos has big plans for the sports scene at UTSA, she has strong leadership already in place in key roles. Here are some highlights heading into a new year for athletics.

- **Men's Basketball**: Campos gave head coach Steve Henson a contract extension through 2024 after he led his team to just its second 20-win season since 1992 and earned 2018 Conference USA Coach of the Year honors. The upcoming season could very well be a defining one for UTSA, which brings back several starters, including 2018 Conference USA Freshman of the Year Jhivan Jackson. The Roadrunners will host Oklahoma on November 12 in one of the most anticipated games in the history of the Convocation Center.

- **Women's Basketball**: A 9–21 record wasn’t the outcome Kristen Holt hoped for in her first season as head coach at UTSA, but optimism emerged after the team won six of its final 10 games, including the program’s first victory at the Conference USA Tournament since 2014. [Scan the Sombrilla Live icon or visit Sombrilla Magazine online to read more about Holt's inspiring approach.]

- **Football**: Head coach Frank Wilson recruited what many college football analysts consider the most talented class in program history in 2018, and the young Roadrunners will need to be at their best as they kick off the upcoming season with tough matchups against Arizona State, Baylor, and Kansas State. UTSA will also be breaking in new coaches on each side of the ball: offensive coordinator Al Borges, who previously guided Auburn and Michigan to incredible seasons, and defensive coordinator Jason Rollins, who was promoted from his post as UTSA's linebackers coach.

- **Women's Golf**: Under the guidance of first-year head coach Summer Batiste the team claimed the 2018 Conference USA championship in April. Julie Houston and Ana Gonzalez led the way by finishing in first and second place, respectively, at the event. UTSA would go on to place 12th at the NCAA Regionals and 10th at the NCAA Championships, respectively, in Austin in May, capping the team's most successful season in its 13-year history.

- **Soccer**: Campos made her first head coaching hire at UTSA when she put Derek Pittman in charge of the women's team. Pittman comes to San Antonio from the University of Idaho, where he coached the Vandals to Big Sky Conference regular season championships in 2015 and 2016. During his time in Idaho he mentored 47 Big Sky All-Academic honorees, while his teams set program records for wins, goals, assists, shutouts, and game attendance.

- **New Heights of Success**: It's all about building, and Campos knows how to build a winner. Northern Arizona transformed into one of the Big Sky Conference's premier programs under her watch. She filled head coaching vacancies for men's and women's basketball with highly touted talent from big-time college basketball institutions. The university also earned its first NCAA national championship (in men's cross country), 32 total conference championships, and two Big Sky Presidents’ Cups for overall competitive and academic excellence during her tenure. There's an overwhelming sense among donors and UTSA officials that if Campos could achieve that much in Flagstaff, she's capable of leading UTSA to never-before-seen heights in San Antonio.

Campos also seeks improvements beyond game day venues. She notes that various training facilities could use some love and that it was “very important” to her that the athletics administrators move from the University Heights offices to Main Campus. Now that the athletics department has been restructured to include new executive senior associate athletics directors for external relations (Katie Douglass) and finance and strategic initiatives (Mike Bazemore), the department’s biggest priorities in the months ahead will be crafting a comprehensive strategic plan to identify needs in UTSA's athletics facilities and individuals who can help make those improvements possible.

“It’s so obvious how passionate people are for not just athletics but UTSA as a whole,” Campos says. “They recognize that this institution can transform this city. And so do I.”
The Rodríguezes (A.J., Alex and Arthur) embody the “Now and Forever” Roadrunner creed.
professionals and serves San Antonio in myriad ways.

Arthur Rodriguez admits that his college memories are a little hazy, now that nearly four decades have passed since he got his degree, but he’ll never forget making the drive from Kelly Air Force Base, where he worked full-time, to attend night school on Main Campus. The commute he made on so many of those evenings in the late 1970s is nothing like the trek he makes to visit his granddaughter, Alexandra, at UTSA today. “It was like taking a ride through the country [back then],” he says.

For Arthur, his time at UTSA was all about “going to class and going home.” He was already married to his beloved Norma and was also the father to young son A.J. After serving in the military Arthur used his GI Bill benefits to attend San Antonio College before going to Our Lady of the Lake University for a semester. He recalls UTSA was the only four-year public university in the area,” Arthur says. “It was only four buildings, but we were so happy to have it!”

All those scenic drives, all those nights away from home, and all of Arthur’s hard work paid off when he earned his B.B.A. in 1979. But he wasn’t the only nontraditional student in his family to earn a degree from UTSA that year; his father-in-law, Caesar B. Garcia, achieved his dream of becoming a college graduate when he obtained a B.A. in Spanish at 59.

Caesar (better known as C.B.) was also a veteran who put military service before his own formal education. He enlisted in the Navy as the U.S. entered World War II in 1941, just two years after he graduated from San Antonio Tech High School (now known as Fox Tech). While on active duty he served on the U.S.S. Wisconsin in the Pacific and also became an accomplished middleweight boxer, notching a 52–2 record in the Navy and sparring with eventual Boxing Hall of Famer Archie Moore. C.B. returned to San Antonio in the postwar years, working in radio electronics at Kelly AFB and staying active with the U.S. Naval Reserve until he retired in 1975.

Norma says that education was always very important to C.B., which is why her father served on the Edgewood School District board and took on additional jobs to put her and her two brothers through college. His family called him “the walking encyclopedia.” C.B. fluently spoke English, Spanish,
mid-1990s, the campus was abuzz about the new Business Building. He remembers hanging out in the common area and rekindling friendships with grade school classmates who went to different San Antonio high schools, but his proudest memories came after he acquired his B.B.A. in 1998 and went for his M.B.A. at the newly constructed Downtown Campus. He took all-day courses on Saturdays, and because he and wife Estelle lived nearby, A.J. and his buddies would often pack the Rodriguez living room during those hour-long Saturday lunch breaks.

One of those classes stands out above the rest: John Merrifield’s international economics course. It was widely known to be a difficult course, A.J. says, and Merrifield told the students that very few earn an A grade. A.J. and his study partner, Nim Meishar, made it a personal challenge to get the highest grades in the class. As a handful of students dropped the course, they studied tirelessly. He still recalls eagerly going to the instructor’s office with Nim to find out what grade they’d been given.

“We were the only two that got As,” A.J. recalls. “[Merrifield] told us, ‘There are high notes and there are low notes. Remember that for the rest of your life. But today, you get the two high notes.’ We worked really hard, and that made it all worthwhile.”

Since acquiring his M.B.A. in 2000, A.J. has become one of San Antonio’s most notable civic leaders. He served as president and CEO of the San Antonio Hispanic Chamber of Commerce from 2004 to 2008, which more than doubled its membership base during his tenure. He then took on the role of deputy city manager for the City of San Antonio from 2008 to 2011, directly supervising the areas of international relations and economic development, among other departments. He took a position at the Zachry Group in December of 2011—where he’s now the vice president for external affairs—but he’s also serving on the SA2020 Talent Pipeline Task Force and is the chairman of the board of directors of the Texas Association of Business. Through it all, A.J. has maintained close ties to UTSA. He’s a member of the Development Board and chair of the advisory council for the College of Public Policy. He says he enjoys giving back to the university, not only because he’s thankful for his education and the opportunities that came with it but because he’s genuinely excited about UTSA’s “incredible growth” and evolution. “To see that as an alum makes you proud,” he says. “What’s happening with the athletic program and football, with all the new research, with
new degree programs being created—it’s extraordinary.”

He’s now the proud father of a Roadrunner as well. His oldest, Alexandra (everyone calls her Alex), is a communication major. Although she toured several Texas colleges, Alex says she always leaned toward UTSA because her family spoke about the university with adoration. She says she’ll never forget the sense of honor she felt when she received a class of 2019 T-shirt at her freshman orientation. “UTSA was so welcoming,” Alex says, “and that’s what San Antonio as a whole is all about.”

Alex is following in the family footsteps in more ways than one. While digital communication has been the emphasis of her coursework, she’s also pursuing a business minor. She hopes to eventually earn a master’s at UTSA just like her dad. Alex is even doing her part to help the city. In 2016 she researched economic impact data and worked on social media engagement for the San Antonio Tricentennial. She also organized surveys and wrote scripts as an intern for the City of San Antonio’s government and public affairs department.

Studying at UTSA and empowering San Antonio: It’s a Rodriguez tradition. And if Norma has her way, it’s a tradition that will keep going for years. “I was really proud my father attended UTSA,” she says, “and even more proud that it became the school where my husband, my son, and my granddaughter all attended.” She pauses momentarily before nodding at Alex’s younger brother, Arthur John. “We’re hoping to get another young man to go there.”

TRUEST COLORS

By Shea Conner

Best known for his business acumen and civic leadership, A.J. Rodriguez ’98, M.B.A. ’00 is also an accomplished abstract artist

abstract paintings often incorporate bold colors, distinct black lines, and precise paint splashes that portray motion. He says he has tried to maintain “similar strokes and movement,” even as his technical acumen and the subjects have evolved from series to series. He has now created collections based on the River Walk, birds of South Texas, and the relationship between human form and emotion. “It forces me,” he says, “to learn about things—that I wouldn’t normally learn about—in a deep, meaningful way.”

One of his most recent artistic pursuits led him to Mexico City’s Plaza de Toros México, where he watched traditional Spanish bullfights in an effort to capture their beauty and brutality. These experiences were the inspiration for Colores e Imágenes; Arena y Sangre, a nine-painting series.

Rodriguez describes the series as his “most illustrative” work. In a pair of poignant paintings, for example, he first depicts the tranquility as the two opponents size each other up, followed by the intense moment as the bull digs into the dirt to charge the sword-wielding matador.

Rodriguez says he takes pride in the evolution of his artwork and the raw emotion he was able to communicate. “When I did these,” he says, “I felt like I had surpassed my own expectations. And that’s always a good feeling.”
LINDSAY FULLER ’17 held stellar aspirations ever since she was a child, and now she’s an astrophysicist

BY JOANNA CARVER

Having perfected her astrophysics expertise as a doctoral student at UTSA, Lindsay Fuller ’17 is now exploring the great unknown.

Originally from Shreveport, Louisiana, Fuller had aspirations to become an astronaut when she was young. She was obsessed with the stars as a child and, growing up, wanted to turn that into a career. After learning, though, that most astronauts had backgrounds as military pilots before joining NASA, Fuller joined the U.S. Air Force right out of high school. She spent six years in the military doing intelligence work before deciding it was time to start chasing the mysteries of outer space.

“I met with members of the physics and astronomy department at UTSA,” Fuller says of her research into astronomy, a Boeing 747 jet with a massive telescope installed inside. The aircraft is the largest airborne observatory in the world and allows for views of space clear of some of the atmospheric obstructions of Earth. “It was incredible,” Fuller says. “I was surrounded by all of these professional astronomers operating this airborne telescope, and I was still only in the second year of my program at UTSA.”

The experience helped Fuller’s confidence and tested her analytical skills. After she received her results, she spent more than a year analyzing them and writing her first scientific study. She focused on the duct surrounding active black holes, which she found was more compact than previously thought. Fuller published her study in the summer of 2016, while she was still a Ph.D. candidate at UTSA. The following year, her study received national attention when NASA featured it on the front page of its website. NASA repeated the feature on Black Hole Friday in 2017.

“It was surreal,” Fuller says. “The paper was such a challenge and the fact that NASA wanted to feature it was one of those things I could only dream about 10 years ago. But now it’s a reality and it feels incredible.”

Fuller graduated with her Ph.D. from UTSA in December 2017. She worked on another study while doing postdoctoral work at UTSA, with plans to pursue a career in research.

While she no longer thinks becoming an astronaut is in the cards for her, she still draws inspiration from Sally Ride, the first American female astronaut. “I heard Sally Ride speak once,” Fuller says. “I think of a real pioneer in the STEM field, and I think of her. She arrived at NASA and was one of maybe five women among 100 men. Because of her, I’ve never felt like I had any barrier as a woman in physics.”

She adds, “I’d tell any woman who aspires to be in the STEM field not to let being a minority discourage her, because she’s just as good as anyone else.”

“...but also so exciting to see this great, impressive telescope and speak to astronomers who were living my dream.”

Packham was deputy principal investigator for the development of one of the first instruments for the telescope. This took Fuller to Spain to observe black holes in the central regions of active galaxies as part of her research about the structure and evolution of black holes.

The following year, Fuller took a big leap forward—and upward—with her research when she boarded NASA’s Stratospheric Observatory for Infrared Astronomy, a Boeing 747 jet, surrounded by all of these professional astronomers operating this airborne telescope, and I was still only in the second year of my program at UTSA.”

A NASA’s SOFIA telescope, scanning from inside a Boeing 747 jumbo jet.

Fuller says she wanted to be an astronaut as a child, but she still got to work with the stars.
Keep up with fellow Roadrunners as they make their mark on the world.
If you've had some life change, be sure to let us know. Whether a strategic career move or promotion, being honored with an award, or even cementing your roots with a new marriage, a new baby, or even a new pet (alma mater gear for any kind of family newborn or new adoptee always gets a birds-up)—whatever the news—share!

1979
Michael Bernard, B.A. in political science, has joined the business litigation practice group in the San Antonio office of Dykema Cox Smith. Bernard previously practiced in the San Antonio office of Bracewell LLP, and prior to that was San Antonio’s city attorney from 2005 to 2013. During his time with the city, Bernard served as the chief legal adviser to the city council, city management, and all other departments. He also, during his 30-year career, worked as the first assistant in the district attorney’s office. Bernard’s practice will focus on commercial and labor litigation as well as public law.

1983
Hector Saldaña, B.A. in sociology, has been named curator of the newly created Texas Music Collection in Texas State University’s Whittliff Collections. Saldaña spent more than 20 years writing about a range of subjects while a reporter at the San Antonio Express-News. He is a leading expert on San Antonio’s conjunto, Tex-Mex, Chicano rock ‘n’ soul, and West Side sound. He also is the founder and songwriter for The Krayolas, which have been featured in Texas Monthly, Pollstar, Billboard, the Los Angeles Times, The Washington Post, The Village Voice, and on NPR’s “All Things Considered” and Sirius XM’s “Little Steven’s Underground Garage” and “Kick Out the Jams with Dave Marsh” radio programs and on MTV.

1995
Linda Y. Cardenas, B.B.A. in marketing, has been named head of viewer experience operations at Hulu’s new contact center in San Antonio.

1996
William Burmeister, B.S. in civil engineering, joins Vickrey & Associates as vice president in charge of hydrology and hydraulics. He is a licensed professional engineer in Texas and Florida. He has more than 20 years of experience in water resources program and project management, land development, and municipal engineering design.

1998
Edward Ashley, B.S. in kinesiology, has been named principal of Boerne’s Samuel V. Champion High School. He was the school’s academic dean since 2012.

2004
Tiffanie S. Clausewitz, M.P.A. in public administration, was named one of the recipients of the San Antonio Business Journal’s 2017 Outstanding Lawyers Awards. She is a partner at the Rosenblatt Law Firm.

2005
J. Ryan Parker, B.B.A. in finance, has been appointed the San Antonio CEO at BBVA Compass. He will lead commercial banking and small business operations for BBVA Compass’ local global wealth team and will manage a local advisory board.

2007
The Borderlands Research Institute at Sul Ross State University has appointed Ryan Luna, M.S. in biology, to the newly created Kelly R. Thompson Professorship in Qual Research. Prior to receiving his master’s from UTSA and Ph.D. from Texas State, Luna worked as a game warden for the New Mexico Department of Game and Fish.

2010
Robert Anguiano, B.B.A. in real estate finance and development, has been named a vice president at Vickrey & Associates. Anguiano has more than 17 years’ experience in transportation, transit, airport, drainage, utilities, power delivery, and land development. His expertise includes mobile and aerial LiDAR and 3D mapping. He will oversee survey operations of the land surveying and geospatial division.

2011
Aaron Jarrett, B.S. in architecture, M.Arch. in architecture ’16, is now an architectural designer with St. Louis–based PGAV Destinations, an international attraction design firm.

2013
Carl Myers, B.A. in communication, has made the move to Los Angeles after being hired to take charge of the Los Angeles Zoo and Botanical Garden social media channel. The zoo opened on November 28, 1966, and is home to more than 1,100 mammals, birds, amphibians, and reptiles, representing more than 250 different species, of which 29 are endangered. The zoo’s botanical collection comprises several planted gardens and over 800 different plant species with over 7,400 individual plants.

2015
Alexandra Frey, B.B.A. in finance, has been named executive director of the 80/20 Foundation. She was promoted from her role as operations manager, a position she held since August 2016.
LEADERSHIP
Legend

Founder of the UTSA Ambassadors PAT GRAHAM retires after four decades

BY MICHELLE MONDO

Inside the Denman Room of the Student Union, a line of people stretched from one end to the other, all waiting to get a few moments with the woman of honor: Pat Graham.

With Graham retiring after 43 years, the event celebrated her dedication to the university and its students. Current and former UTSA Ambassadors gathered with Graham's family, friends, and colleagues to say farewell.

UTSA neuroscience professor Nicole Wicha '93, a former ambassador, reminisced about a trip to Atlanta and how she had talked Graham into letting her visit a friend. Unfortunately, she got stuck in traffic on the way back to meet the group and nearly missed the return flight. “This was before cell phones. I sprinted through the airport and when I boarded everyone on the plane cheered because Dr. Graham got them to hold the plane for me.”

Graham explained later, with a laugh, “That was when you could go up near the cockpit, and I went right up there and said, ‘You have to wait; she’ll be here.’”

The Ambassadors program is one of Graham’s greatest legacies, starting in 1988 and continuing today with a group of 60 or more student leaders. The ambassadors act as hosts at campus events, university-sponsored conferences, and community and alumni functions.

But that was just one facet of Graham’s work. At the time of her retirement, she was executive director of the Special Events Center and oversaw events such as Commencement and Convocation.

She has worked as the assistant vice president for student services, associate vice president for student affairs, and assistant to the vice president for student affairs for planning and special programs.

Graham began her career at the university in 1974—before Main Campus was built—signing on as the associate dean of students and director of the testing center. Even back then she paid no attention to the chorus of criticism that said the planned university was going to be too far away from San Antonio. “I expected it to grow but just not as quickly as it did. We hoped it would. As you bring in different faculty and degrees, it grows, and it’s changing all the time.”

Graham saw the need for the Ambassadors as students began seeking out opportunities to get involved. The first group didn’t live on campus (there were no options for that yet) but wanted a college experience filled with volunteering and ways to make a difference. And those moving to San Antonio wanted cohesiveness with other students. Now, the program provides more than 8,000 service hours a year to the university community.

Working with students for so many years has taught Graham the best way to offer support. “Don’t preach,” she says. “There’s nothing worse. To me the best thing is to say, ‘Why are you doing that?’ If you start by saying what they are doing won’t work, they are out of there. But if you think, ‘Well, maybe there’s something I’m not seeing, it can be really significant.”

She also created the Pat Graham Scholarship Fund as a way to continue helping students.

The legacy Graham wants to leave is not just the scholarship or the Ambassadors program but the feeling of belonging and continued tradition. When she’s asked students what they like about UTSA, they’ll often say that they feel like faculty and staff care, that they want them to succeed. And for Graham, “That is, I think, the nicest thing I’ve ever heard.”
Undertaking a swim from Japan to California, BENOIT LECOMTE ’95 hopes to increase awareness of ocean pollution.

BY MICHELLE MONDO

Even with six years of planning, Benoit Lecomte and his team knew there was much they would not be able to control after they embarked on his attempt at a world-record–setting, 5,500-mile swim across the Pacific Ocean. Just 25 miles off the coast of Japan, his starting mark, Lecomte hit his first big challenge—a potential typhoon. The weather eventually calmed, though, so he could continue.

Lecomte, who at press time was still on course from Japan to San Francisco on a swimming schedule of eight hours a day, every day, for six to eight months, has a goal to raise awareness for ocean conservation. His planned path should take him straight through the Great Pacific Garbage Patch, a mass of floating plastic waste. He’s also become a human science experiment. He will be studied to determine the effects of extreme exercise on the heart and how low-gravity conditions from being in the water for hours at a time affect bone density, posture, and vision.

A team of researchers from several scientific institutions, including NASA and Woods Hole Oceanographic Institution, will conduct studies in eight different areas, according to the expedition’s website, The Longest Swim. “From plastics pollution to space exploration,” the site states, “this adventure will be a unique opportunity to collect data and learn more about the oceans and human body in extreme conditions.”

To prepare for the Pacific Ocean expedition, Lecomte swam six hours a day in open water, ran, and cycled. He also completed a 37-hour swimming marathon. Keeping himself hydrated and fueled for such rigorous conditions means ingesting up to 8,000 calories a day, which includes stopping at regular intervals for liquid meals aboard the sailboat Discoverer, which will shadow Lecomte throughout his swim for his safety and to collect the data to be evaluated. He’s also writing blog posts each day so that followers can check in on his progress. And tense moments, like on Day 1: “In the fifth hour [we got a call from the support team] to let us know that they had spotted a five-foot-long shark. They were sending out medic Maks on a kayak to bring the shark-protection device. Before Maks got to us I saw a three-foot shark swimming right below me in the opposite direction. I stopped to look around but couldn’t see anything. I had limited visibility. Paul and Ty asked if I wanted to get out of the water, but I decided it was safe to continue swimming, so I just did.”

Lecomte is no stranger to pushing himself to new limits. In 1998, just three years after graduating from UTSA’s College of Business, the French native swam across the Atlantic Ocean to raise awareness for cancer research in honor of his father, who died of cancer in 1991 at age 49.

In an interview with UTSA Today in 2012, Lecomte said it was his parents who pushed him to explore and learn about other cultures. They supported him when he decided to attend university in San Antonio. “Life is a big adventure,” Lecomte said at the time. “And not only do I hope to be an inspiration for others, but I also draw inspiration by seeing the struggles others are able to overcome.”
Two UTSA alumni are among “10 Texas Artists to Collect Now,” according to Texas Monthly. Kitty Dudics M.F.A. ’81, who taught painting at Del Mar College in Corpus Christi for 34 years, often focuses her work on water, inspired by the Gulf Coast. Her ‘Runner roots have continued in her family: Son David Dudics Jr. ’17, received his M.S. in geology from UTSA.

Cruz Ortiz ’00, famed for his paintings, drawings, and public art, lives in San Antonio, where he’s taught high school art on the SouthSide. His works are so legendary that he’s been commissioned by the likes of Hillary Clinton and Castro brothers Julián and Joaquín. But Texas Monthly’s editors note that “it’s his personal portrait work, with its whimsy and bold use of color, we love most.”

Kitty Dudics often creates using water themes, including this (above) pool scene.

Dudics’ portrait of her son painted in front of West Texas mountain peak El Capitán.

A Texas-themed portrait by Cruz Ortiz.
Do you have a question about science or literature or any topic that’s always made you wonder “What? How? Why?” but you never got around to looking into it? Let us know at sombrilla@utsa.edu and we’ll find a UTSA expert to explain it.

We have years of theoretical research coming to life right now and are on the cusp of building something real.

Elon Musk, the tech leader who wants us to take vacations to the moon, has called artificial intelligence “the biggest risk we face as a civilization.” And he’s not alone in his worries. Just think of Hollywood’s representations of the Terminator, HAL, or Haley Joel Osment in that one Steven Spielberg movie. Our human fears of technology are nothing new, but with the birth of AI it has definitely hit 11 on a 10-point scale. But do we really need to start stockpiling our post-apocalypse supplies?

UTSA computer science professor in practice Amanda Fernandez has a pretty good idea. In her first year at UTSA, Fernandez rebooted the Introduction to Artificial Intelligence course. She’s also presented at the Grace Hopper Celebration of Women in Computing conference and has received the Provost Teaching Innovation Grant Award for designing hands-on activities for her AI students to introduce concepts needed in modeling machine intelligence, while also incorporating the latest AI technologies.

With AI the buzzword of 2018, Fernandez answered some of Sombrilla Magazine’s questions about her field and addresses fears that humans will one day be subject to computer overlords.

**You research machine learning but what specifically?** Machine learning is a subfield of AI—being able to create machines and algorithms that can see what human eyes can see, like robots that are more adept at helping individuals through their daily lives. Home care is a good example, helping someone maneuver in their home. Even in terms of prosthetics for individuals who have lost vision, some of the constructs apply to retinal prosthetics and help somebody to see better.

With my particular research, the most direct impact will be on areas relying on machine learning with a combination of a camera. Looking at creating better cameras that can identify objects better and make sure they are in focus, for example. Let’s say you set up a tripod, you put your camera up there, and everyone runs to get a group photo. When the camera looks at the group, it is trying to determine depth of field, make sure people’s faces aren’t blurry. Any improvements on those algorithms are my specialty.

**What got you interested in machine learning?** I was always interested in physics and math, and then I discovered computer science. In grad school I moved toward machine learning and AI because of algorithms and subfields that deal with forensics and how you can create something that fools some of these algorithms. For example, if I have an algorithm that recognizes cat images—and that’s what it does and it’s very good at it—how many pixels do I have to change in a picture of a duck for the algorithm to think it’s a cat but it still looks like a duck. You can see how this can be applied to forensics. How many pixels do you have to change on a check to make it look like $1 million instead of $10.
Did you get to trick a lot of algorithms? Yes. I was doing both, trying to trick the algorithm and trying to create algorithms that can’t be tricked. The other thing that’s kind of interesting is if you see pictures in the media, sometimes those are altered and it’s easy to see if an image is Photoshopped. But some are modified in another way, and we can’t see it as humans. So some machine-learning algorithms that might be tricked, they can look for common issues and identify forgeries.

So basically you’re helping computers see. Sort of like when the Terminator determines who John Connor is and then makes the decision to eliminate him? Just part of it. Most of my research is going to help the Terminator know the difference between John Connor and the bush next to him, or John Connor and another person next to him.

The elimination part is not really part of my job.

OK, but you don’t think we’ll end up with robot overlords? [Laughs] No. We are pretty far behind. We are at the point where we have the equivalent of artificial intelligence in pieces, in separate labs everywhere. It’s not like we’re building the ultimate machine and putting all the pieces together. Self-driving cars will be a great AI revolution but they won’t be our overlords. It’s just an interface. Honestly, we have years of theoretical research coming to life right now and are on the cusp of building something real. But maybe six different somethings.

Then I’ll put away my fear about that. [Nods with a smile] You can feel safe in doing that.

Where do you see AI fitting in at UTSA and having the biggest impact? Now that I’m offering this course, for me the biggest impact is making sure I’m training these students well. I have students who will be artificial-intelligence ready for the workforce. Overall, I’m excited for AI here. If you want to do a whole bunch of AI things at UTSA, we are building it. It’s going to be great. In the computer science department, we have a data science concentration. They already offer the machine-learning class, and we now offer Intro to AI, which covers all the different areas. Computer engineering offers robotics, and the College of Business looks at cybersecurity and the business end of AI. It’s not just our department; it’s across disciplines.
We come from different backgrounds. We have different ideas. We dance to different beats. But for all our differences, Roadrunners share a common bond: We believe in UTSA and in the power of education to change our lives and change the world. We belong here. All different. All Roadrunners.