

PULSE

A PUBLICATION *for* ALUMNI & FRIENDS *of* TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER



WINTER 2018 • CELEBRATING SUCCESS 24 • MARKING A MILESTONE 30 • CARING FOR THE C-SUITE 34

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ON THE COVER

Barbara Cherry, DNSc, MBA, (Nursing '97), right, and Lisa Campbell, DNP, hood Tracey Page, DNP, (Nursing '14) at commencement.

PHOTO BY ZACH TIJERINA

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ARTIE LUMMER

IT'S ONLY THE BEGINNING

This past year was an exciting one for TTUHSC. We led the state by awarding 2,178 degrees (a university record), surpassed half a million clinic visits for the first time and executed the university's first-ever license agreement with a biotechnology company for a vaccine, which has worldwide humanitarian implications.

Individually, each TTUHSC campus has some significant accomplishments.

The Abilene campus celebrated the naming of the Julia Jones Matthews Department of Public Health and put the finishing touches on the public health building. We anticipate receiving full accreditation this summer, bringing us one step closer to our sixth school.

In Amarillo, we officially opened the new 21,000 square-foot, state-of-the-art SimCentral simulation lab. This is truly a model of institutional collaboration between TTUHSC, West Texas A&M University and Amarillo College that will benefit the entire region. See page 20 for more information. We are also excited about the new Student Center, which officially opened Jan. 31. This area provides the first interprofessional area on campus for students to study, relax and interact.

The School of Pharmacy expanded its Doctor of Pharmacy program on our Dallas campus from a two-year to four-year program.

On the Lubbock campus, we celebrated the ceremonial groundbreaking for three new buildings—the University Center, West Expansion and the Conference Center. (The Summer 2017 issue of PULSE provided complete coverage). This year, we anticipate breaking ground on a new VA Outpatient Clinic. We are honored to be the site of this clinic, which will expand and improve care for South Plains veterans and allow invaluable training opportunities for our students.

At the Permian Basin, we're looking forward to the opening of the 51,000-square-foot Academic Classroom Building. We broke ground last year on this new facility, which will boast state-of-the-art space for lectures, research, conferences and more. This will truly be a significant addition for the entire community.

This is only the beginning of what will undoubtedly be a year full of highlights and accomplishments for TTUHSC; 2017 was a great year, and we move into 2018 with great anticipation!

Tedd L. Mitchell, MD
TTUHSC President



@TeddLMitchell



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FOCUS ON COMMUNITY

In May 2013, TTUHSC El Paso became the fourth freestanding university in the Texas Tech University System with a mission to bring world-class education, research and patient care to the Borderland. I am proud to say that in this short period of time, we have expanded our reach to hundreds of thousands of underserved El Pasoans and provided high-quality, competitive education to nearly 1,000 future health care professionals.

Last September, Texas Tech Physicians of El Paso (TTP) hosted its inaugural West Health Fest. The free community event drew more than 2,000 El Pasoans to the new Transmountain Campus, solidifying TTP El Paso's presence as the largest multispecialty medical practice in the region.

As the nation's newest teaching hospital, The Hospitals of Providence Transmountain Campus is actively recruiting the best and brightest talent to serve the border region. Here, our students are being trained by leaders in their fields, with access to state-of-the-art facilities and advances in medicine including treatment options that patients may not have access to in a traditional hospital setting.

The TTUHSC El Paso campus is also rapidly expanding its enrollment and research capacity. In the past two years, we've added three new programs: the Master of Science in Biomedical Sciences, the Post-Baccalaureate Certificate in Biomedical Sciences and the leadership-focused Master of Science in Nursing. This year, we also started construction on the five-story, 219,900-square-foot Medical Sciences Building II.

Feasibility planning for the Woody L. Hunt School of Dental Medicine is also well underway. When approved, the dental school will be the first to open in Texas in more than 50 years, bringing much-needed services and career opportunities in dental care to the U.S.-Mexico border.

Another key element in TTUHSC El Paso's growth trajectory is our application for independent accreditation by the Southern Association of Colleges and Schools Commission on Colleges, which is currently under review. This accreditation is one of the most important steps in our establishment as an independent health sciences center and will be a testament to our effectiveness as a burgeoning institution.

Throughout these first five years, we have remained committed to the community that was so instrumental in getting us to where we are now. I look forward to seeing our university continue to expand its footprint over the next five years.

Richard Lange, MD, MBA
TTUHSC El Paso President



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MOHAMAD AL-RAHAWAN, MD, associate professor in the School of Medicine Department of Pediatrics and medical director of the Pediatric Hematology Oncology division, received the UMC Health System Joon Park, MD, Endowed Chair in Medical Excellence.

THERESA BYRD, PhD, associate dean and chair of the Graduate School of Biomedical Sciences Department of Public Health, was selected as the 2017 American Public Health Association and Health Promotion Distinguished Career Award recipient.

RONALD COOK, DO, associate professor in the School of Medicine Department of Medical Education, was re-elected to the Texas Medical Association Council on Medical Education.

SHARMILA DISSANAÏKE, MD, (Resident '06) Peter C. Canizaro Chair of the School of Medicine Department of Surgery, was appointed to the National Committee on Trauma by the Regents of the American College of Surgeons.

BRIAN IRONS, PHARM D, professor in the

School of Pharmacy and director of the Ambulatory Care division, received the American College of Clinical Pharmacy 2017 Ambulatory Care Practice and Research Network Achievement Award.

RICHARD LAMPE, MD, professor and chairman of the School of Medicine Department of Pediatrics, received the Sidney Kaliski Award of Merit from the Texas Pediatric Society.

SAMUEL D. PRIEN, PhD, professor in the School of Medicine Department of Obstetrics and Gynecology and director of Clinical Obstetrics and Gynecology Laboratories, received the American Society for Reproductive Medicine 2017 Star Award.

GABOR B. RACZ, MD, chairman emeritus of the School of Medicine Department of Anesthesiology and Grover E. Murray Professor, is recognized for his national and international distinguished achievement in the treatment of pain by the American Society of Interventional Pain Physicians with the introduction of the Racz Excellence Award for Outstanding Contribution and Performance.

Six faculty members from the School of Nursing were honored by the South Plains Great 25 Nurses: **KAREN ESQUIBEL, PhD, RN**, (Nursing '02, '97); **BIBHA GAUTAM, PhD, RN**; **EMILY MERRILL, PhD, FNP**, (Nursing '94); **AMY MOORE, DNP, RN**; **AHNNA PARKER, MSN, RN-BC**, (Nursing '07); and **LINDA MCMURRY, DNP, RN** (Nursing '10, '04).

LESLEE J. TAYLOR, PhD, LAT, program director and associate professor for the School of Health Professions Master of Athletic Training Program, was elected president of the Commission on Accreditation of Athletic Training Education.

Three faculty members from the School of Nursing were elected to the Texas League for Nursing Board of Directors: director for communications, **KYLE JOHNSON, MSN, RN**; director for membership, **LAURA OPTON, DHSC, RN**, (Nursing '95); director for education, **LAURA THOMAS, PhD, RN**, (Nursing '04).

PATRICIA YODER-WISE, EDD, RN, dean emerita and professor for the School of Nursing, was elected president of the National League for Nursing Board of Directors.

Pharmacy Professor Helps Define New Blood Pressure Guidelines



The new diagnostic blood pressure guidelines, released recently by the American College of Cardiology (ACC) and American Heart Association, represented several years of work and research by an interdisciplinary writing committee whose members represented 11 different organizations. One of those committee members, Eric MacLaughlin, PharmD, is a professor and chair for the School of Pharmacy Department of Pharmacy Practice at Amarillo.

“As a member of the

Guidelines Writing Committee, my role was to lead the literature review and writing of the various sections to which I was assigned,” MacLaughlin explained. “All of the authors also served to review, edit and revise the guidelines and their accompanying documents, including the data supplement tables and results of the meta-analyses that were undertaken by the Evidence Review Committee specifically for these guidelines.”

MacLaughlin said the new guidelines’ goal is to ultimately improve public health and decrease the morbidity and mortality associated with elevated blood pressure.

“Hypertension remains the leading cause of death in the United States and worldwide,” he added.

According to an online ACC news story published Nov. 13, the new guidelines eliminate the prehypertension category and will now classify patients as either Elevated (120-129 and less than 80) or Stage I hypertension (130-139 or 80-89). The former guidelines classified 140/90 mm Hg as Stage 1 hypertension, a level classified as Stage 2 hypertension by the new guidelines.

In addition, the ACC news story said the new guidelines stress the importance of using proper technique to measure blood pressure; recommend the practice of home blood pressure monitoring using validated devices; and highlight the value of appropriate training of health care providers.

Other guideline changes include a recommendation that clinicians only prescribe medication for Stage I hypertension patients who have already had a cardiovascular event such as a heart attack or stroke and those who are deemed to be at high risk based on their age, the presence of diabetes mellitus, chronic kidney disease or calculation of atherosclerotic risk using the same risk calculator used in evaluating high cholesterol.

“The guidelines will undergo a periodic review and will be updated as newer literature becomes available,” MacLaughlin said.

TTUHSC at Abilene’s Department of Public Health Renamed

The Texas Tech University System Board of Regents approved the naming in August of the Graduate School of Biomedical Sciences Department of Public Health at Abilene as the Julia Jones Matthews Department of Public Health.

“On behalf of everyone at TTUHSC, I want to express my sincerest thanks to Mrs. Matthews for providing us with this foundational and transformational gift,” said Tedd L. Mitchell, MD, TTUHSC president. “Her willingness to so boldly place her faith in TTUHSC and our ability, through our faculty, our students and the learning and research that takes place in the Abilene campus to positively impact West Texas, means the world to us. We are proud to have her legacy live on through the department and in the future School of Public Health.”

Matthews died in November 2016 and was a long-time supporter of the Abilene community, Hendrick Medical Center and TTUHSC through the Dodge Jones Foundation. She was a key supporter of bringing TTUHSC to Abilene, and her philanthropic efforts resulted in an impact of more than \$23 million for TTUHSC’s programs in Abilene. In 2014, the Dodge Jones Foundation, along with other Abilene community partners, contributed to the establishment of an accredited School of Public Health, which included the construction of a building for the school.



Julia Jones Matthews (center) enjoys the spotlight as Abilene’s Outstanding Citizen of the Year in 2000 with Sen. Kay Bailey Hutchinson (left) and former UK Prime Minister Margaret Thatcher.



Researcher Receives Highest Faculty Honor

The Texas Tech University System in December approved Vadivel Ganapathy, PhD, professor and chair of the School of Medicine Department of Cell Biology and Biochemistry, as a Grover E. Murray Professor.

The Grover E. Murray Professorship is intended for a faculty member who attains national and international distinction for outstanding research and scholarly and creative achievement.

“Murray professors represent the very best among our faculty,” said Steven L. Berk, MD, TTUHSC executive vice president and provost and dean of the School of Medicine. “We value Dr. Ganapathy for his research and his many contributions to our university, and we are proud to commend him with this honor.”

Ganapathy has 35 years of academic experience as a researcher, educator and administrator. In his career, he has received more than \$19.5 million in grant funding for his primary interest in cancer biology from sources including the National Institutes of Health, Medical College of Georgia Research Institute, Department of Defense, and Health Resources and Services Administration.

Ganapathy has cloned more than 40 transporters that carry nutrients such as amino acids and vitamins in the human body. This transporter biology is the primary focus of his research, and modulation of selective transporters provides

potential novel treatments for hemochromatosis and certain cancers, such as colon, pancreatic and cervical cancer. Ganapathy received the prestigious Rank Prize in 2003 for his work on the identification, molecular characterization and control of cellular nutrient transporters. He has served on numerous editorial boards and as a reviewer for many of the country’s top science journals. To his credit, Ganapathy has more than 460 research publications and 29 book chapters.

Current faculty members previously named Grover E. Murray Professors include: Sharon Decker, PhD, Gabor Racz, MD, Afzal Siddiqui, PhD, Quentin Smith, PhD, and Surendra Varma, MD. Former faculty Grover E. Murray Professors include: Neil Kurtzman, MD, John Orem, PhD, Cynthia Raehl, PharmD, Doug Stocco, PhD, and Abraham Verghese, MD.



Women Outnumber Men in TTUHSC School of Medicine Class of 2021

Enrollment of female students in the School of Medicine has never reached more than 50 percent—until this year.

In August, 180 medical students, which includes 92 women, donned their white coats, marking the first year in the school’s more than 40-year history that women outnumber men.

“The significance is now we’ve reached equality in the people entering medicine,” said Sharmila Dissanaik, MD, (Resident ’06) Peter C. Canizaro Chair of the Department of Surgery. “It’s the first step, and that’s important. This is exciting.”

5 minutes with the faculty...

BATTLING THE SMART DISEASE

SANJAY SRIVASTAVA, PHD | Dedicated to Beating Cancer | By Jo Grant Langston

Sanjay K. Srivastava, PhD, chair of the School of Pharmacy at Abilene Department of Immunotherapeutics and Biotechnology, has dedicated his research career to battling cancer, describing the challenge this way: “Cancer cells are the smartest things on Earth; they change and aren’t that easy to kill. They find a way to survive.”

Finding drugs to combat this “smart disease” lies at the heart of his more than 30-year career. About two decades ago, he and his research team began looking differently at current drug therapies used to fight cancer—and that change has proved promising.

“My early research was focused on natural products and chemicals present in fruits and vegetables as cancer-fighting agents, but it takes a long time for them to go through the development and testing phase to get to the clinic,” said Srivastava. “We began looking at existing drugs and determining if they could attack cancer cells.”

In particular, his team looked for drugs to fight breast cancer, which can metastasize to the brain, a major cause of cancer-related deaths. Most existing drugs used to stop the spread of the disease to the brain have limited success because they can’t cross the blood-brain barrier. Srivastava’s team began looking at antipsychotic drugs as possible treatments.


“To our surprise we found that some of the antipsychotic drugs had significant anticancer effects, so they were able to suppress the growth of metastatic breast cancer and glioblastomas,” Srivastava said. “Penfluridol, a drug used to treat schizophrenia, was the most successful in our research.”

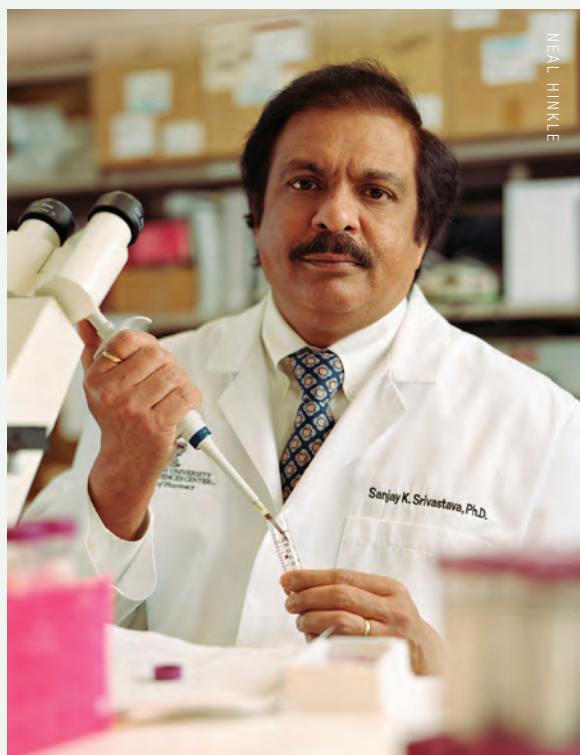
The discovery, he said, could revolutionize cancer treatment and forge better outcomes for patients. His lab is now working aggressively toward repurposing existing drugs for cancer therapy.

An NIH R01 grant-funded researcher and internationally recognized expert, Srivastava has been a TTUHSC faculty member since 2007 in the Department of Biomedical Sciences. In 2014, he was named as the associate dean for research for the School of Pharmacy at Amarillo, and in March 2017 became the chair for the Department of Immunotherapeutics and Biotechnology in the School of Pharmacy at Abilene. He received the 2017 Outstanding Achievement in Cancer Research Award from the Society of American Asian Scientists in Cancer Research in Washington, D.C., and was named a TTUHSC Distinguished Professor in 2015. He has been a recipient of several other awards including the President’s Excellence in Research award.

Srivastava has published almost 150 papers in high-impact journals including *Cancer Research*, *Oncogene*, *Clinical Cancer Research* and *JBC*, has several patents, and has presented at multiple national and international conferences.

Srivastava’s family history with science and education motivated his early pursuit of a science career. Academia is a family tradition and includes his father and sister, who are both professors and department chairs, as well as his sons, Sameer and Suyash, who are pursuing undergraduate degrees in chemistry and biology.

The fight to halt cancer fuels the Srivastava lab every day. “I have a passion for research,” he said. “I enjoy spending time in my lab with my graduate students and post-docs looking for a way to combat cancer.” 





TTUHSC Extends Reach to Austin College Graduates

TTUHSC President Tedd L. Mitchell, MD, and Austin College Board of Trustees Chair David Corrigan signed the AC/TechConnect partnership July 26, guaranteeing qualified Austin College students the opportunity to interview for admission into competitive graduate professional health sciences programs at TTUHSC.

“As more students choose private colleges to begin their higher education, it is important we expand the opportunities available to them after their graduation,” Mitchell said. “Austin College is home to some of the brightest students in Texas. These students are setting themselves up for success, and we look forward to their continued success and development as health care professionals at TTUHSC.”

This agreement will benefit students seeking master’s level or higher degrees after receiving their undergraduate degrees from Austin College. Students will have the opportunity to interview with the TTUHSC Graduate School of Biomedical Sciences and the schools of Health Professions, Medicine, Nursing and Pharmacy.

New TTUHSC Psychiatry Residency Program

TTUHSC at Amarillo is collaborating with the Amarillo VA Health Care System to start a psychiatry residency program, with the goal that those who complete their training in Amarillo will stay to serve the community.

Richard Jordan, MD, regional dean for the School of Medicine at Amarillo, said students who graduate from TTUHSC and are interested in psychiatry currently have to leave the Panhandle for their residencies or choose another specialty field.

That’s why TTUHSC is working to create the program; funding, however, has been a challenge.

“Most residents are paid largely through Centers for Medicare and Medicaid Services,” he said. “But those spots are frozen. They have been since the mid-’90s.”

That’s where the collaboration of the Amarillo VA came in.

Director of the Amarillo VA Health Care System Michael Kiefer, said they see an extreme need for psychiatrists as well. The VA currently uses programs such as telehealth to get veterans the mental health services they need, and they’re now planning to help fund residency positions to increase services.

“They made a commitment through their sacrifice of service to be exposed to those traumas of war,” Kiefer said. “And now it’s our responsibility to make sure that we’re able to address the issues that they do bring home with them, and this will really help us address those issues.”

The plan is to combine the faculty from TTUHSC and the VA to provide training for residents. Jordan also added, “The VA will allow those residents totally funded by the VA to rotate to community non-VA mental health sites. The program will also have a special track for medical students that have a military obligation and want to train in psychiatry. This is a unique program that will greatly benefit the U.S. Department of Veteran Affairs, the U.S. armed forces and the civilian population.” The goal is to have the program operational by July 2020.

The Amarillo Hospital District has also made a commitment to fund the psychiatry residency with \$100,000 per year to help recruit psychiatry faculty for the residency program and to provide additional capacity to treat patients with mental health conditions.



New Regional Dean for Dallas School of Pharmacy Campus Appointed

Steven Pass, PharmD, was named regional dean for the School of Pharmacy at Dallas in September. Pass said his new appointment is an honor, and he looks forward to facing the challenges of his new position by working closely with campus faculty, staff, students and residents.

“I genuinely hope to provide strong leadership that will contribute to the growth and continued success of what I believe is a truly special place,” he said.

Pass, professor for the Department of Pharmacy Practice, has served since 2011 as the School of Pharmacy’s vice chair for residency programs. Under his leadership, the school’s residency program has become one of the nation’s strongest, with 36 residents currently working in the school’s 16 affiliated post-graduate programs. In addition, 41 of 48 (85 percent) residency applicants from the School of Pharmacy class of 2017 found residency slots, a success rate that is well above the 68.5 percent national average for such placement.

Pass earned his doctorate from the University of Kentucky College of Pharmacy in 1996. In 1997, he completed a pharmacy practice residency at Baptist Memorial Hospital in Memphis, Tennessee, and in 1998, he completed a critical care residency at The University Hospital in Cincinnati. During his career, Pass has focused on providing quality pharmacotherapy in the critical care setting and advancing pharmacy resident education and training.

MATTERS

of the heart

“Day of Service” Propels Medical Student to Further Volunteer Service

Second-year medical student, Caleigh Cole, volunteered last year for “Day of Service,” and the experience she had at Buckner International was so rewarding, she continued volunteering as a mentor to foster children.

“Day of Service,” hosted by TTUHSC students, is a day where students give back by serving local charities in their community. By volunteering, students are compelled to think about the reason they entered into the health care profession. Many students also find relief from the pressures of their studies and are reminded why they chose TTUHSC.

“I liked volunteering at ‘Day of Service,’ and afterwards was looking for something long term,” Cole said. “Medical school is about balance. Focusing less on your knowledge and more on the person and their emotions keeps the human and relational aspect in what we do.”

Buckner International is a global ministry that works with at-risk children and senior adults by providing housing and guidance. They provide adoption services to families, temporary homes for foster children, and independent and assisted care for seniors.

Cole has worked as a mentor with Buckner International for more than a year now. Her adviser helps her foster relationships with the people she meets, which creates a stronger bond between Cole and her mentees and their families.

“When I met my first mentee, I fell in love with her and her family,” Cole said. “We both loved baking, so every time I came over, I would bring ingredients and we would bake together. She ended up moving in with her uncle, which was where she wanted to be. It was sad for me to see her go, but it was good for her.”

For Cole, volunteering not only made an impact on her mentees and their families, but has changed her life and will influence how she practices medicine.

“Mentoring someone with a different background than my own enabled me to gain a new perspective,” Cole said. “I have been able to gain the trust of my mentees; they opened up to me about their often-difficult situations. The most important aspect of my job as a volunteer is to be a constant in the kids’ lives to help them overcome some of these adverse events. Medical school can isolate you, so I find going out into the community to be an insightful and rewarding experience.”


More than 200 students from all schools volunteered at 18 local organizations throughout TTUHSC campus communities, helping charities with everything from mentoring children to cooking and cleaning.



Caleigh Cole, second-year medical student, volunteers at Buckner International.

“I went to the Ronald McDonald House to help with cooking and cleaning,” said Tim Dixon, Student Government Association president and a second-year medical student. “When we first created the public post for ‘Day of Service,’ we had 100 students signed up to help in the first 24 hours. We maxed out the slots by the end of the week. The people and organizations are so thankful to the students who come to help. It is so easy to get caught up with school and the stress of grades. I believe this creates a residual effect that drives students to continue volunteering for more than just one day a year.”

Students interested in volunteering, Dixon said, should look to their peers’ experience working in the community, such as Cole’s, and how it has added value to their lives. He said it can make a difference in how physicians see their patients.

“To be a good physician isn’t all about knowing facts,” Dixon said. “What differentiates a good physician from a great physician is a person who empathizes and relates with people. It builds that humanity. The better you know your patients, the more you can help them. Volunteering is key to reminding us of why we entered health care.” 

Abilene Student Earns Second Place in ASHP Competition

Congratulations to Hayley Brazeale, a fourth-year pharmacy student at Abilene, who earned a second-place finish in the American Society of Health-System Pharmacists' (ASHP) Fall 2017 New Drug Update competition.

The New Drug Update competition is a national clinical writing competition hosted by ASHP's Community and eCommunications Advisory Group. Participants are asked to write a report regarding specified newly approved medication. The biannual competition was held for the first time in March, but this was Brazeale's first time to participate.

The New Drug Update competition is open to pharmacy students throughout the country, and Brazeale said all ASHP student members were invited to compete.

"Competitions like this provide extra practice to develop the clinical skills we learned as a student," Brazeale said. "I like competing in these contests because they challenge me to strengthen and perfect the skills studied during school in order to work on improvement."



TTUHSC Receives St. Baldrick's Grant for Pediatric Cancer Research

TTUHSC will receive one of 39 infrastructure grants being awarded through the St. Baldrick's Foundation.

The 39 grants total \$2.2 million, and TTUHSC is receiving \$45,816.

C. Patrick Reynolds, MD, PHD, director of the School of Medicine Cancer Center and professor in the School of Medicine Department of Pediatrics, Department of Cell Biology and Biochemistry and Department of Internal Medicine, is the principal investigator who will receive the funding.

"Childhood cancer is the No. 1 cause of death by disease of children in the United States, but receives only a tiny fraction of the funding devoted to adult cancers," Reynolds said. "St. Baldrick's provides grants to support childhood cancer research, and, in the case of the grant to TTUHSC, they support a clinical research associate (CRA) that is critical to our ability to enter patients into clinical trials.

"Our cancer center develops novel clinical trials for children with cancer, and the CRA, supported by St. Baldrick's, is part of a team that develops and makes those clinical trials available to children here and in many institutions across the country."

School of Nursing works with TTU to Create Course for Pre-Nursing Students

TTUHSC has collaborated with Texas Tech's College of Media & Communication to give nursing students the tools they need to communicate effectively in the health care industry.

In 2016, the School of Nursing faculty recognized that students coming into the traditional BSN program did not possess the necessary skills to communicate effectively with patients or other health care professionals. The concept, said Melanie Sarge, PhD, assistant professor for the College of Media & Communication, who helped create the course, is to show future nurses how to tailor messages so their patients can comprehend and adhere to treatments, becoming a partner in their health care.

Communications in Nursing was initially offered in fall 2017 as one section with 100 seats; however, the college expanded the course to 350 seats over three sections for spring 2018 because of high demand. An online option for pre-nursing students at other campuses is also available.

School of Nursing undergraduate advisor Sonia Moore, MEd, will be teaching one of the sections this spring.

"This course is designed to help them develop skills necessary to become quality nurses who will be empathetic toward their patients who are incapacitated and need assistance from others," Moore said. "I have included opportunities for students to hear directly from nurses who work in all areas of health care, including NICU, ER, OR and hospice."

El Paso Nursing Dean Novotny Celebrates Coming Retirement

Health care leaders from around El Paso came together in October to pay tribute to Jeanne M. Novotny, PhD, RN, as she retires from five years of service to the Gayle Greve Hunt School of Nursing (GGHSON).

Novotny, who was recruited to the school by its namesake, Gayle Greve Hunt, is credited with improving a passing rate that was stuck in the mid-60s to the current rate of more than 90 percent.

"If I spent an hour describing what Dr. Novotny has done on campus, it still wouldn't capture all that she has meant to us," said TTUHSC El Paso President Richard Lange, MD, MBA. "Jeanne brings gravitas; she brings experience; she brings wisdom. She has very good judgment with people, and she has surrounded herself with associate and assistant deans and faculty who are truly outstanding and have advanced the nursing school."

After proposing a toast in recognition of her contributions to the nursing school, Lange gave Novotny a presidential plaque reserved for those who have served at the university for 20 years or more.

"You ask, 'Why are we giving this to Jeanne?'" Lange said. "She's taken 20 years of service and condensed it to five years. In this short period of time, she has put this nursing school on the map."



Jeanne M. Novotny, PhD, RN, (middle) celebrates her upcoming retirement with Gayle Greve Hunt and TTUHSC El Paso President Richard Lange, MD, MBA.

Novotny told the crowd she came to the GGHSON not knowing too much about the area, had never lived in the West and was looking forward to a "great adventure."

"What I didn't anticipate happening is meeting the wonderful people in the community," Novotny said. "I didn't anticipate falling in love with El Paso. I honestly can say I love this community."

Though Novotny will remain at the school as the search for her replacement continues, she said she is looking forward to some long hiking treks in retirement.



First-place Texas Tech Fitness Challenge winner Rachel Lee races through a 250-meter row.

2,000 Attend West Health Fest at Texas Tech Physicians El Paso at Transmountain

The newest Texas Tech Physicians of El Paso clinic, Texas Tech Physicians El Paso at Transmountain, opened its doors to the public Sept. 9 for the West Health Fest. The free event, jointly hosted by Texas Tech Physicians of El Paso and TTUHSC El Paso, featured a fitness challenge, health screenings, cooking demos, Zumba and yoga classes, an inflatable obstacle course, and prizes.

The event highlight was the Texas Tech Fitness Challenge. Participants in the CrossFit-inspired workout were challenged to complete a 250-meter row, followed by six to eight tire flips, a sled pull (95 pounds for males, 65 pounds for females) and a set of burpees (15 reps for males, 10 reps for females). First- second- and third-place winners were selected based on the fastest times for each event.



To see more photos from the West Health Fest, visit TTUHSC El Paso's Facebook page @TTUHSCEP.

\$420,000 Grant Funds Study on What Makes Humans Susceptible to Zika

Haoquan Wu, PhD, associate professor in the Paul L. Foster School of Medicine, has received a two-year, \$420,000 grant from the National Institute of Allergy and Infectious Disease (NIAID) to study the mosquito-borne Zika virus.

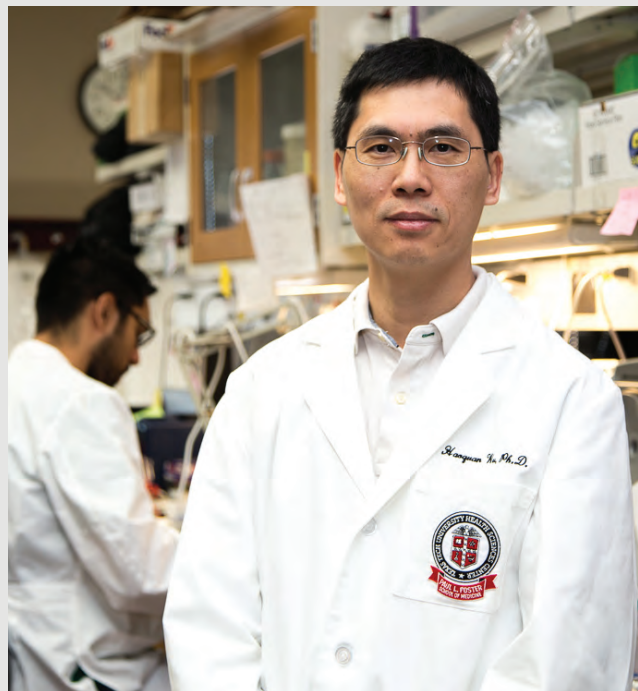
“Zika virus outbreaks pose a serious health challenge worldwide,” Wu said. “However, very little is known about this virus, including how it replicates and kills host cells.”

With the NIAID grant, Wu and his colleagues at TTUHSC El Paso will try to determine which human genes enable the virus to attack and kill human cells. To do this, Wu will conduct a genome-wide knockout screening—a process of elimination that specifically deactivates each gene in the human genome to identify the genes involved.

As each gene is deactivated, cells will be put to the test and infected with Zika. The cells that are able to resist and survive the virus’ attack will help identify the genes Zika is harnessing to survive in the human body.

“By deactivating one gene at a time, we hope to understand how the virus takes advantage of certain properties of human cells to aid the virus in multiplying and ultimately destroying our cells,” Wu said. “With this information, we then could develop specific and effective treatments to stop Zika.”

Wu and his team plan to use CRISPR-Cas9, a technology that allows scientists to deactivate genes, to conduct their work.



Ogechika Alozie, MD, MPH, TTUHSC El Paso’s chief health informatics officer, right, answers questions about health IT in the December session of “The Exam Room.”

TTUHSC El Paso Launches Health Care Q&A Sessions

TTUHSC El Paso has launched a new initiative on social media called “The Exam Room.” The program leverages Facebook’s video feature, Facebook Live, to integrate health care professionals directly into the El Paso community through an online platform.

Each month, staff members in the Office of Institutional Advancement select a health care topic—such as cancer, prenatal care or the flu. A TTUHSC El Paso health care expert who specializes in the field is then invited to talk about the subject. The public can tune in at any time during the hour-long livestream and pose questions directly to the featured physician via Facebook Live’s comment box.

“The Exam Room” was created to build awareness about the expert health care specialists at TTUHSC El Paso. The sessions have been a hit with the community thus far, attracting an average of more than 600 views each.

“Not only does ‘The Exam Room’ get our physicians out there, but it also helps fulfill a genuine need for our community,” said Veronique Masterson, associate managing director for the Office of Institutional Advancement. “If we can help address even one individual’s worries or inquiries about illness, then ‘The Exam Room’ has done its job.”

Texans Gather to Honor Officer Floyd East Jr.

On Oct. 17, hundreds of El Pasoans and other Texans from across the state gathered at El Paso's Abraham Chavez Theatre to honor fallen Texas Tech police officer Floyd East Jr.

Two days earlier in Lubbock, TTU and TTUHSC faculty, staff and students gathered to honor East with a memorial for his service and dedication to the university.

"We offer our heartfelt condolences to the family," said TTUHSC President Tedd L. Mitchell, MD. "We are thankful every day for our Texas Tech Police Department and all law enforcement personnel who keep our community safe."

East, a native of El Paso, died Oct. 9 in the line of duty. He served on the TTUHSC El Paso campus from December 2014 to April 2017 before transferring to the TTU campus in May to complete field training. He had plans to return to his hometown when a position became available at TTUHSC El Paso.

East was recognized as a hero who sacrificed his life while working to protect the TTU community.

"Every day our police officers walk out in the world knowingly risking their lives to ensure that our lives are protected," said TTUHSC El Paso President Richard Lange, MD, MBA. "There is really no greater act of selflessness than that."

During the memorial service, East was remembered as a loving father, husband and colleague. Family member Angie Escarciga described him as a witty and warm friend who excelled at carpentry, seafood boils and barbecuing, and enjoyed exhilarating activities like horror movies, skydiving and deep-sea diving.

She said East's favorite quote—popularly attributed to legendary author and thrill-seeker Hunter S. Thompson—was: "Life should not be a journey to the grave with the intention of arriving safely in a pretty and well-preserved body, but rather to skid in broadside in a cloud of smoke, thoroughly used up, totally worn-out and loudly proclaiming, 'Wow! What a Ride!'"

People paid their respects to East, with an overwhelming show of support from law enforcement agencies. Police officers traveled from as far as Chicago and New York, and from numerous cities across the state, including Austin, Corpus Christi, Galveston, Laredo, Lubbock, Marfa, Midland, Odessa and San Antonio.

Many of East's local comrades in uniform also attended, as well as representatives from the El Paso Border Patrol, County Sheriff's Office, Fire Department, Police Department and others who assembled to salute the East family as they entered the theater for the service.

"Thank you for all the resources you have provided to ease the stress of bringing Floyd home and laying him to rest," Escarciga told TTU System officials during the ceremony. "Raider community in Lubbock and El Paso, we love you. You have restored our faith in the goodness of humanity by your outpouring of love and support."

The service ended with a release of 1,000 blue and black balloons as a symbolic farewell to East. As directed by Gov. Greg Abbott, state entities across Texas lowered their flags to half-staff in his honor.



One thousand blue and black balloons are released in a symbolic farewell to fallen Texas Tech Police Officer Floyd East Jr. Below, TTU and TTUHSC students, faculty and staff gathered in Lubbock to honor East for his brave service.



JUST *the facts*



175 TTUHSC students from the schools of Nursing and Health Professions were published in the book, "Toy Guide for Therapeutic Play," showcased at the Interprofessional Toy Fair and Expo last fall. The book helps parents with their children's skill development.

19,000 service hours are provided by TTUHSC El Paso students to the community every year.



130 faculty, students and student families attended the TTUHSC 2017 Biomedical Sciences' Graduate Student and Faculty Retreat in Lubbock.



200,000 patients are served in TTUHSC El Paso's ambulatory clinics each year.

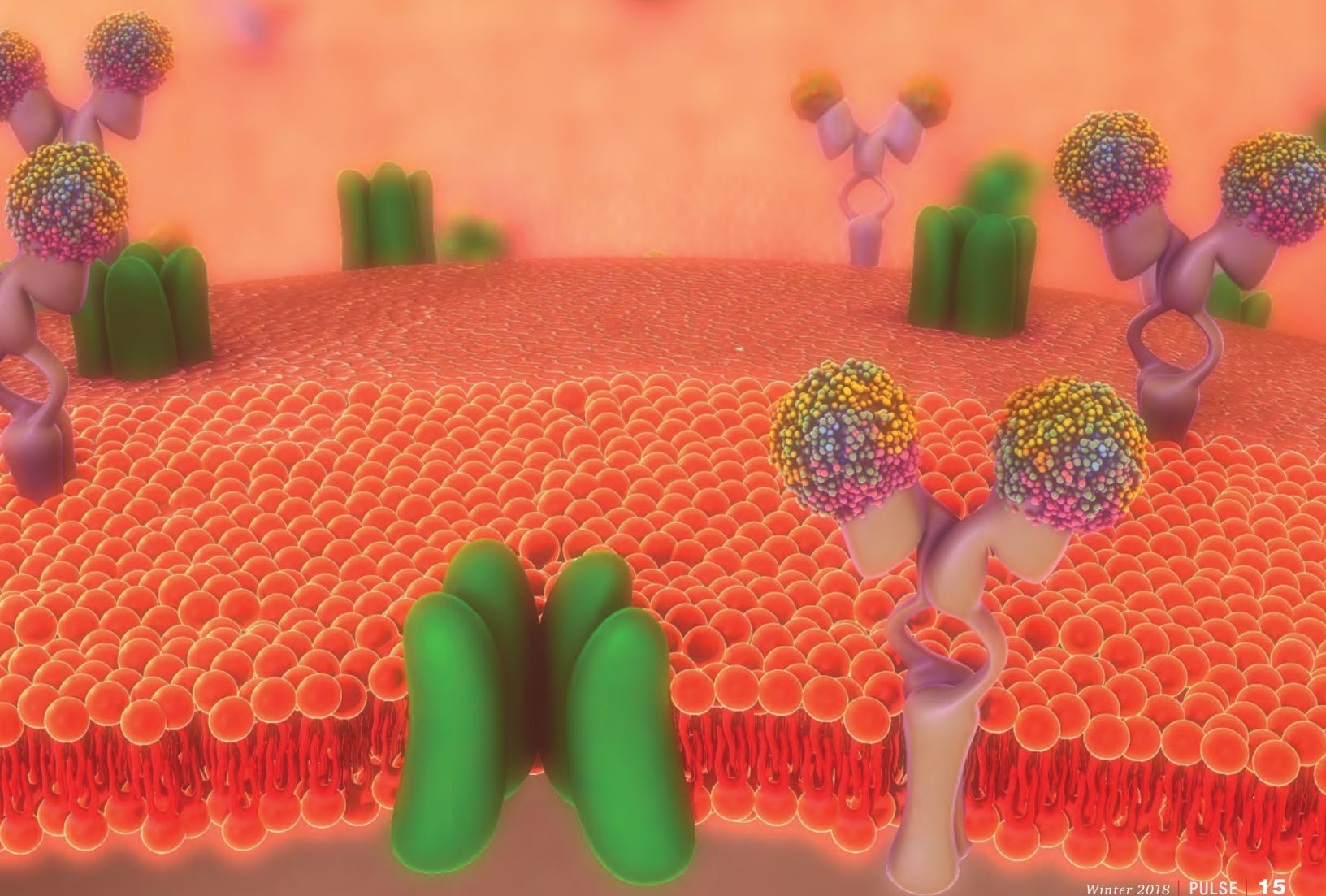


1,446 students were enrolled in School of Health Professions' programs offered on four TTUHSC campuses in fall 2017, making it one of the largest and most diverse health professions schools in Texas.

394,354 total pounds of recyclables are kept out of landfills, thanks to TTUHSC El Paso's Alan Nasits Go Green Recycling Program. For more information, visit <http://bit.ly/2Alhawc>.



3D-image of a cell membrane featuring potassium channels (in green) regulated by two internal gates, working in a concerted fashion to allow the flow of potassium ions out of the cells.





Opening Gates for Better Targeting Drugs

Researcher Determines the Kinetic Cycle of Potassium Channel at Atomic Resolution

By Suzanna Cisneros

Photos provided by the TTUHSC Office of Communications and Marketing

Researchers at the TTUHSC School of Medicine Department of Cell Physiology and Molecular Biophysics and the TTUHSC Center for Membrane Protein Research have determined the kinetic cycle of a potassium channel at atomic resolution. Potassium channels are important for the normal functioning of the human body. The research study, “The gating cycle of a K⁺ channel at atomic resolution,” was featured in the November issue of *eLife*.

Luis G. Cuello, PhD, an associate professor in the Department of Cell Physiology and Molecular Biophysics, said through this research, we now know every single atom of this molecule and what it is doing.

Ion channels are located in every living cell of the human body. They mediate ions transport into and out of the cells to signal many physiological processes. Neurons in the nervous systems rely on ion channels for cell-to-cell communication. Potassium channels are membrane proteins that create an aqueous pore, which is regulated by two internal gates that work in a concerted fashion to allow the flow of potassium ions out of the cells.

“In the perfect world, new and safer therapeutic drugs would interact only with a given targeted ion channel, but there are thousands of proteins within the human body, each of them doing a different function, and non-specific binding of currently available therapeutic drugs is the main reason for the undesirable side effects of drug therapy,” Cuello said. “When a doctor gives you a medication, it not only interacts with a specific type of protein, but with many others, which causes side effects. However, knowing how a potassium channel moves at



This is important because the pharmaceutical industry is investing billions of dollars every year in the discovery of more potent and safer therapeutic drug molecules with less side effects...

atomic resolution will allow us to target specific spots within the channel structure to correct a given illness while decreasing undesirable side effects. This is important because the pharmaceutical industry is investing billions of dollars every year in the discovery of more potent and safer therapeutic drug molecules with less side effects that can correct potassium channels dysfunction (potassium channels malfunction can cause epilepsy, heart diseases, chronic pain and diabetes)."


Potassium channels have to open and close to perform their normal physiological function within the human body, but mutations within the human DNA can render a channel always open or closed. This research will allow the creation of new drug molecules that can work as potassium channels openers or inhibitors.

The simplest description of the gating cycle of the pore domain of a K^+ channel requires at least four distinct kinetic states. The KcsA, a bacterial potassium channel, was cloned many years ago. In 2003, Roderick MacKinnon was awarded the Nobel Prize in Chemistry for his work on the atomic resolution structures of ion channels, among them two different kinetic states of the closed conformation of KcsA. However, it took more than a decade to determine the structure of KcsA in the open state.

Cuello, along with D. Marien Cortes, also from the TTUHSC Department of Cell Physiology and Molecular Biophysics, and Eduardo Perozo, PhD, a professor from the University of Chicago, determined two open state conformations of KcsA, which together with the two previous structures of the closed states from Mackinnon's Laboratory, recapitulate how KcsA

moves at atomic resolution. No other lab has ever produced the kinetic cycle of a potassium channel at the atomic level. In the cellular environment, potassium channels are highly specialized proteins that must adopt different conformations to perform their biological function. These molecules change their conformation in a cyclic fashion always returning back to the initial or resting state—this is the kinetic cycle.

In 2010, Cuello and his research team created a mutant channel that was always open and although they determined the structure of this conformation, the resolution was very low, which yielded an extremely blurry image of KcsA in the open state. In this new research article, Cuello and his lab locked open KcsA by engineering disulfide bonds that will hold the channel open and determined two new kinetic intermediate snapshots at very high resolution, the open-conductive and the open-inactivated states, which together with the existing structures for the C/O (high K^+ -structure) and the C/I (low K^+ -structure) conformations solved by the Mackinnon Lab, recreate a kinetic cycle for a potassium channel at atomic detail.

"We knew if we could trap the channel in action, while in movement, we could have something similar to a movie depicting the opening and closing of the channel at the atomic level," Cuello said. "When I was young, I remember those comic books in which by flipping the pages you could see a little drawing moving. We have done exactly the same here but with a molecule and at atomic resolution. KcsA contains two different types of gates, the activation and the inactivation gates. This study shows how they work in a concerted fashion to regulate the flow of potassium ions coming out of the cell." 

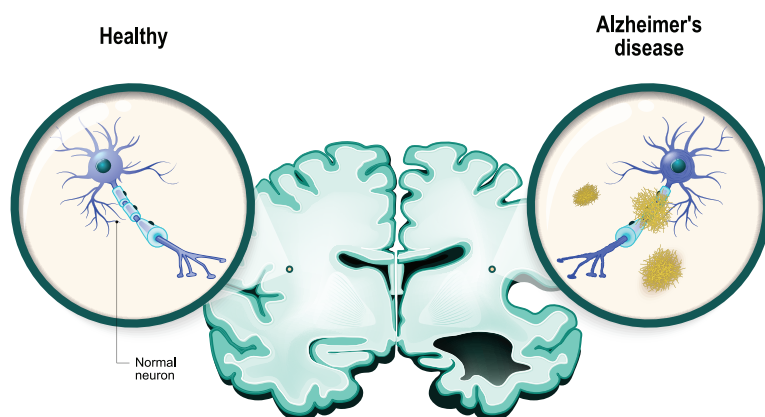
RESEARCHERS IDENTIFY PROMISING COMPOUNDS TO TREAT NEURODEGENERATIVE DISEASES

The study, “Target- and Mechanism-Based Therapeutics for Neurodegenerative Diseases: Strength in Numbers,” published in the November issue of the renowned *Journal of Medicinal Chemistry* describes new compounds designed and synthesized in the lab of Paul Trippier, PhD, that show the effects of protecting human neurons in a dish from a form of cell death common in neurodegenerative diseases such as Alzheimer’s disease and Parkinson’s disease.

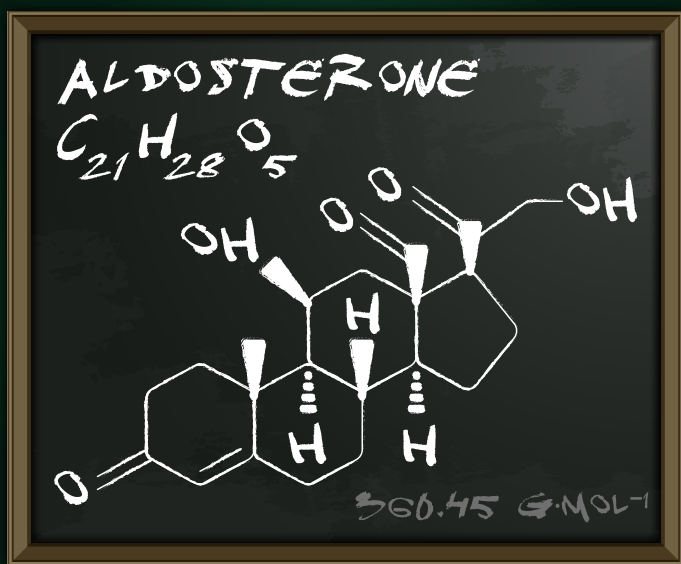
Trippier said the TTUHSC research team grew functional human neurons from stem cells and then treated them with the synthesized compounds. When cell death was induced, many more neurons that had been treated with the new compounds survived than did those that were not treated.

“These compounds are in the early stages of drug discovery, but they show promise for the treatment of many different types of neurodegenerative disease,” Trippier said. “The advantage to this study is the use of stem cell-derived functional human neurons.

Many studies have identified compounds that can protect either neuron-like cells or mouse neurons, but they rarely carry forward to show effect in humans.”



Paul Trippier, PhD, right, is an assistant professor for the School of Pharmacy at Amarillo Department of Pharmaceutical Sciences. He is collaborating with the lab of Abraham Al-Ahmad, PhD, an assistant professor in the same department.



Dylan J. Meyer, is a PhD candidate and Pablo Artigas, PhD, is an associate professor in the School of Medicine Department of Cell Physiology and Molecular Biophysics.



RESEARCHERS USE A PUMP-INDUCED DISEASE TO DEFINE UNDERLYING MOLECULAR MECHANISM

Dylan J. Meyer and his advisor, Pablo Artigas, PhD, presented, in collaboration with Craig Gatto, PhD, at Illinois State University, a study of the functional effects of specific mutations of the Na/K (sodium/potassium) pump found in tumors that induce primary aldosteronism, a condition known as Conn’s syndrome. The study, “On the effect of hyperaldosteronism-inducing mutations in Na/K pumps,” was published in the October issue of the *Journal of General Physiology*.

Aldosterone is a hormone made by the adrenal gland that helps control blood pressure by changing the levels of electrolytes such as sodium and potassium in the blood. Too much aldosterone causes the body to hold onto sodium and water and to get rid of potassium in unsafe amounts, increasing the amount of fluid in the body and, therefore, increasing a person’s blood pressure.

“Primary aldosteronism is the most common cause of secondary hypertension and is often caused by a benign tumor in one adrenal gland, which continuously produces aldosterone in the absence of normal physiological triggers,” Meyers said. “These tumors frequently have defective sodium potassium pumps.”

Artigas said it’s always important to understand why and how these and other mutations induce disease.

“The mechanisms uncovered here surely apply to other illnesses in which the Na/K pumps are mutated, including hemiplegic migraines and other neurological disorders,” Artigas said. “Knowing the fundamental cause of an illness is the first step in order to one day improve the lives of the people with these mutations.”

INTERVENTION INCREASES COLORECTAL CANCER KNOWLEDGE AMONG HISPANICS

When it comes to colorectal cancer, Hispanics have some of the lowest screening rates in the country. Recent reports suggest that only 47 percent of this group is up-to-date with colorectal cancer screening, compared to 60 percent of non-Hispanics.

Researchers at TTUHSC El Paso are learning how to improve Hispanics' awareness of the disease and their likelihood of getting screened.

In a new study of more than 750 patients—99 percent of whom identified as Hispanic—researchers found that educational material that is bilingual, literacy level-appropriate and culturally sensitive can significantly increase knowledge and testing rates. The study, "Impact of Targeted Education on Colorectal Cancer Screening Knowledge and Psychosocial Attitudes in a Predominantly Hispanic Population," was published in the December issue of the *Family and Community Health* journal.

Bilingual material may sound like an obvious solution, but Jennifer Molokwu, MD, MPH, who co-authored the study, says health education materials tailored for Hispanics are rare.

For the study, the research team first asked the participants to complete a questionnaire assessing their knowledge of colorectal cancer. Survey questions ranged from the warning signs and risk factors of colorectal cancer to treatment options and common myths.

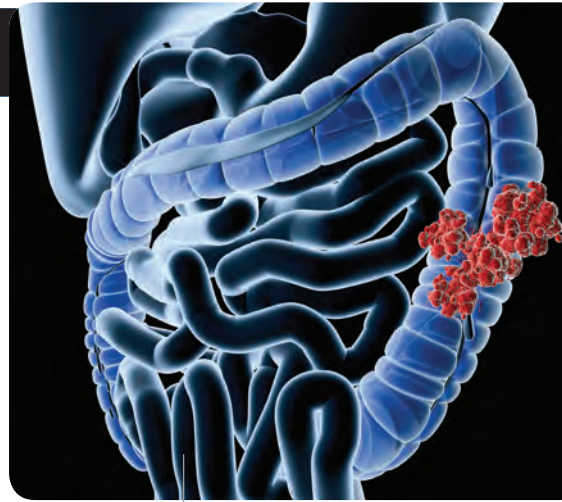
The participants were then randomly assigned to four groups: one that received no education; one that watched a novela-style educational video; one that spoke with a *promotora* (a bilingual Latina trained to provide basic health education); and one that both watched the video and spoke to the *promotora*.

Six months after the initial intervention, the participants were contacted to repeat the questionnaire.

The results revealed that tailored educational materials, no matter the mode of delivery, led to a fourfold increase in knowledge scores among those who received the education, compared to the control group.

"It was very exciting to see that even six months after the intervention, participants still remembered what they had been taught," Molokwu said. "That shows our efforts had a long-term effect."

Similar research by the same team showed that tailored education can also significantly increase screening among uninsured Hispanics. In a separate study on the same cohort of individuals, 88 percent of those who received this education followed through with a colorectal cancer screening by receiving either a colonoscopy or fecal immunochemical test (FIT). In contrast, only 11 percent of those who did not receive the education moved forward with screening.



Jennifer Molokwu, MD, MPH, is an assistant professor and Navkiran Shokar, MD, is a professor and vice chair for research in the Paul L. Foster School of Medicine Department of Family and Community Medicine.

STUDY FINDS DISEASE-CAUSING MUTATIONS RARE IN IGF SYSTEM

Insulin-like growth factors (IGFs) are proteins that are essential for normal childhood growth and development. IGF mutations have been tied to dire health problems like growth failure, intellectual deficiencies and other developmental abnormalities.

The study, "Large-scale analysis of variation in the insulin-like growth factor family in humans reveals rare disease links and common polymorphisms," by Peter Rotwein, MD, published in the *Journal of Biological Chemistry*, shows that variations in IGF proteins are fairly common among individuals, but disease-linked mutations are rare. In fact, they occur in less than one in every 30,000 people. For the study, Rotwein single-handedly sifted through the genetic data of more than 60,000 individuals available in public databases, analyzing the similarities and differences among IGF genes and proteins.

"One bottom line is that disease-causing mutations are very, very rare in the IGF system," said Rotwein. "Another is that we have a lot of new information to understand about how different versions of the same proteins might function slightly differently. For example, they might subtly modify the growth rate of children and their final height as adults, or might alter susceptibility to certain illnesses."

Rotwein hopes to see other researchers investigate IGF proteins as well.



Peter Rotwein, MD, is vice president for research at TTUHSC El Paso.





THE LEGEND, THE DREAM, The Future

BY
KARA
BISHOP

PHOTOS
BY JUSTIN
PATTERSON

NEW BUILDING GIVES SIMCENTRAL ENDLESS POSSIBILITIES

The “unknown woman from the Seine” is a familiar face to those involved in CPR training. According to the legend, a woman’s body was found in the water in Paris and, to help identify her, a plaster mask of her face was made and hung in a shop window. Some years later, Asmund Laerdal, the founder of Laerdal Medical, based in Stavanger, Norway, would find inspiration in her face and create “Resusci Annie,” also known as “Rescue Annie.” She’s the pioneer of simulation used in medical training; the value of such an abstract was further proven in 1969 when a group of medical scholars would publish the study, “Effectiveness of a simulation in training anesthesiology residents.”

As simulation became of interest to the medical profession, the concept made its way in the late ’90s to East Tennessee State University (ETSU), where the residency program director saw the great potential of simulation in medicine. Since then, that program director, Richard Jordan, MD, now regional dean of the School of Medicine at Amarillo, has kept the incredible possibilities of simulation continually in his line of vision.

“This (SimCentral) has been my priority for 10 years,” Jordan said. “When Steven Berk (TTUHSC executive vice president and provost and dean of the School of Medicine) recruited me from ETSU to Amarillo, I told him that my goal would be to have a state-of-the-art simulation hospital. I have been unwavering in that.”



School of Medicine Regional Dean Richard Jordan, MD, pictured with “Lucina,” a high-fidelity female manikin providing opportunities for students studying gynecology and obstetrics.

"THE WONDERFUL THING ABOUT SIMULATION IS THAT WE CAN DO INVASIVE PROCEDURES ON 'PATIENTS' WITH VARYING MEDICAL CONDITIONS, EMERGENT AND NON-EMERGENT, AND PRACTICE MEDICINE BEFORE WE TREAT HUMAN BEINGS."

A HOME FOR SIMCENTRAL

And now, Jordan's goal has become a reality. The new SimCentral —made possible by tuition revenue bonds and a gift from the Amarillo Area Foundation and the American Economic Development Corporation—officially opened its doors Sept. 15, with second-to-none equipment designed to fully exploit the potential of simulation training for students in myriad health disciplines. The addition of this building means every TTUHSC campus now has dedicated simulation space.

"The new building is truly amazing," said John Smoot, senior director of SimCentral. "The students are enjoying the additional space, the faculty are still trying to imagine all the possibilities of the things they can do here, and we're still learning it ourselves. The possibilities are endless."

When the first simulation exercise was performed in Amarillo under the auspice of SimCentral it was obvious then that a building fully dedicated to simulation would be needed.

"We were located at the Texas Tech Women's Health and Research Institute (now the Laura W. Bush Institute for Women's Health) before this new building was built, and the space just wasn't big enough," Smoot said. "Our program kept growing, making our space more confined."

That first year, SimCentral served 3,200 students; last year it accommodated more than 7,000. Smoot said the building obviously wasn't designed for simulation, which made schedules and organization a hardship.

"We had to just go wherever there was an empty room or office; we didn't have dedicated clinical space; and we moved equipment over there multiple times throughout the day," he said.

Named by TTUHSC as a "Center for Excellence Simulation Education and Research," SimCentral's new 21,485-square-foot home provides an additional 13,000 square feet with dedicated clinical space, observation rooms and classrooms, along with space for support staff and equipment.

"It's amazing what we can do in SimCentral now," Jordan said. "The wonderful thing about simulation is that we can do invasive procedures on 'patients' with varying medical conditions, emergent and non-emergent, and practice medicine before we treat human beings."



SimCentral opened its doors in September, celebrated by a ribbon cutting and tours given by students from TTUHSC, Amarillo College and West Texas A&M University.



Max White, NP, paramedic and simulation specialist for SimCentral, teaches high school students CPR. MobileSim recently expanded its services and now visits high schools to teach health care classes.

THE PATIENTS

The “patients” at SimCentral are state-of-the-art manikins that suspend a student’s disbelief of dealing with a manikin and not a human being.

“They can breathe, perspire, bleed, have every murmur known to a human,” Jordan said. “They can show signs of pneumonia and congestive heart failure; and the voice simulation is incredibly advanced, as well, allowing those of us in the control room to speak as men, women or children. The simulation manikins, over time, have just gotten more and more complex.”

It’s not just manikins that are “treated” in the new SimCentral facility.

“We have clinical space in our new building that allows our students to practice patient care and interviewing skills,” Jordan said. “This clinical setting gives our students the opportunity to talk to and treat standardized patients (actors), because one of the biggest complaints about doctors is poor bedside manner. We are able to work on professionalism in these clinical rooms. We have standardized patients that are trained (for specific medical scenarios), and the student gains experience in treating the patient. Once the ‘treatment’ is complete, we review how the student could have improved their care of the patient.”

SimCentral continues to go above and beyond with the addition of their virtual simulation. Guy Gilbert, MS, assistant director of SimCentral and the one Jordan refers to as SimCentral’s “MacGyver,” developed virtual simulation programs to further advance student training and education in working with patients.

“We can have two students working together in a virtual world. In one scenario, for example, one student plays the role of a physician and the other a schizophrenic. The physician sees a normal doctor’s office in his or her virtual world, whereas the schizophrenic is experiencing

MobileSim Serves the Panhandle

Roughly four years into the simulation business, TTUHSC at Amarillo saw the need for a mobile simulation unit.

“We kept seeing that regional hospitals and regional medical facilities had simulation needs that couldn’t be met,” said John Smoot, senior director of SimCentral. “It was difficult for facilities in Hereford and Dumas to get to us so we decided to take simulation to them.”

Made possible by grants from the Laura W. Bush Institute for Women’s Health and the Children’s Miracle Network, along with a collaborative effort between some of the flight services in Amarillo, TTUHSC and some area colleges, the MobileSim division of SimCentral, further enhances the services made possible by simulation.

Max White, NP, paramedic and simulation specialist for SimCentral, is the mobile lab coordinator.

“MobileSim provides great opportunities to regional medical facilities and hospitals,” White said. “We provide continuing education classes for these rural areas and help health professionals enhance their skills using simulation.”

The use of MobileSim recently expanded and is now utilized in teaching high school health care classes.

“I teach the high school classes and help them earn certifications before they start college, and it’s a good course for high school students to determine if they really want to be in the health care industry,” White said.

The MobileSim vehicle comes fully equipped for high- and low-fidelity simulation exercises and can also be used as a clinic and for telemedicine. White said the unit engages in rural community outreach regularly, where it has been used across the Panhandle for cancer screenings and routine well checks.

audible and visual symptoms of the disease process. This helps the physician see inside the mind of a patient with this type of mental illness. This program is unique to SimCentral. There may be some training facilities with virtual simulation, but ours is much more immersive than the typical virtual simulation.”

And that’s not all that Gilbert has created for SimCentral.

“There was some funding given to the pediatric department, which was used for training that the pediatric faculty wanted for their students; however, nothing was on the market in terms of newborn pediatric manikins for the training they wanted, so I created a newborn torso that allowed students to practice performing several invasive procedures,” Gilbert said. “We’ve been using it for three years now, and there’s still really nothing on the market like it.”

However, simulation isn’t just to practice medical procedures on manikins, standardized and virtual patients; it’s also to practice working together.

“Simulation really allows our students to practice teamwork,” Jordan added. “In these acute care situations when someone has respiratory or cardiac arrest, it’s the team that saves that person’s life. The nurse has to know exactly what to do, the doctor has to know what to order, etc. Teamwork saves lives by saving seconds, and sometimes seconds makes the difference in the patient living or dying.”


The interprofessional aspect of SimCentral enhances education, training and preparation for fieldwork. The new SimCentral building serves pharmacy students, with its own incomparable pharmacy clinic, as well as medical students and nursing students—and not just those of TTUHSC at Amarillo.

“We have a unique and stimulating partnership with West Texas A&M University nursing students and Amarillo College nursing and allied health students,” Smoot said. “We share resources, operational costs and have formed a mutually beneficial alliance that has worked exceptionally well, not only impacting Amarillo, but the entire Panhandle as well.”

Simulation has shaken up the medical training industry and enhanced it significantly.

“We can use simulation to diagnose cases, like tricuspid insufficiency (a valvular heart disease referring to the failure of the heart’s tricuspid valve to close properly during systole), which is a case I would have waited my entire residency to see,” Jordan said. “Now, our students go into their residencies and clinical fellowships already having seen just about everything in the simulation setting with an increased confidence in their skillset. This significantly advances our education for students because it compresses the training time for that health professional by exposing them to extremely rare cases before they ever come across it in their actual careers.”

From 10 years ago, when the simulation concept was just a seed in a few brilliant minds, to now with the new SimCentral building, the sophistication and advancement of education in health care will only continue to improve.

“The sophistication of these manikins and simulation in general is not going to stop, and I just hope I’m around 10 years from now so I can see just how great that advancement is,” Jordan said. “Simulation will improve safety and overall efficiency in every way, which is why I’ve always been so passionate about it and why I’m excited for the future.” 

SIMULATION ISN'T JUST TO PRACTICE MEDICAL PROCEDURES ON MANIKINS, STANDARDIZED AND VIRTUAL PATIENTS; IT'S ALSO TO PRACTICE WORKING TOGETHER.



Guy Gilbert, MS, assistant director of SimCentral, Richard Jordan, MD, regional dean for the School of Medicine in Amarillo, and John Smoot, senior director for SimCentral are pictured with a high-fidelity manikin.



Celebrating

Ten years after admitting its first students, the DNP program reflects on its achievements and alumni

Success

BY HOLLY LEGER

Barbara Cherry, DNSc, MBA, (Nursing '97) far left and Mary Fenton, DrPH, RN, (far right) pictured with the first DNP class.

After a decade of working on special projects in the president's office, including developing the Garrison Institute on Aging, Barbara Cherry, DNSc, MBA, (Nursing '97) was handed another big assignment in 2006—to start a new doctoral program for the School of Nursing.

Though PhDs were already available to nursing students at the time, the American Association of Colleges of Nursing (AACN) recognized the need for a practice-focused doctoral program. Nursing professionals needed to integrate the clinical setting with the research completed by those with PhDs.

“As a practice doctorate, nurses focus on evidence-based practice, how to lead change, lots of leadership, how to work in a professional team, quality improvement, population health, access to care and innovation,” Cherry said.

Using the AACN's Essentials of Doctoral Education for Advanced Nursing Practice released in 2006, Cherry, along with a team of faculty, developed and established the DNP program at TTUHSC. As department chair, associate dean and a professor, Cherry said the degree gives nurses a stronger voice to lead and make a difference in health care.

“With the DNP, nurses are fully equipped with the knowledge they need,” Cherry said. “They are equals at the table with other doctorally-prepared clinicians such as physicians and pharmacists

and are highly respected for their expertise. People listen to them.”

The first class graduated in 2010. Since then, the program has produced 180 graduates.

Reflecting on the program's history, Cherry said she has noticed a greater value placed on the degree over time. At first, the program was new and unknown, but now employers often prefer to hire a candidate with a DNP, especially for leadership positions.

Michael Evans, PhD, RN, dean of the School of Nursing, said he continues to be impressed with the program and its graduates.

“We are so very proud of the impact our DNP graduates are making in a variety of settings all over Texas and beyond,” he said. “This program continues to evolve as nursing and health care change.”

Cherry is most proud of the alumni the program has produced over the past decade. She continues to see students and graduates leading positive change in health care throughout the state and nation, either through their doctoral projects or their current roles as leaders in the field.

“When you look back at our students' accomplishments and what they're doing in the workplace now, we have amazing alumni,” Cherry said. “It's really been the most rewarding thing I've done in my career to be a part of this.”



We'd like to introduce you to just a few of the program's graduates, here and online. Visit www.ttuhschool.edu/alumni/pulse.aspx



Bob Dent, DNP, MBA, RN

**Senior Vice President,
Chief Operating Officer and
Chief Nursing Officer,
Midland Memorial Hospital,
Midland, Texas**

**President, American Organization
of Nurse Executives**

**American Academy of Nursing
Fellows (2017)**

DNP Graduate: 2010

Bob Dent, DNP, RN, also a fellow in the American Academy of Nursing, hit the ground running in 2018. The newly-elected president of the American Organization of Nurse Executives (AONE) begins his one-year term for the organization, which consists of about 10,000 members globally. Dent is looking forward to advancing AONE as the voice of nursing leadership across the country.

During his term, he hopes to implement a new AONE fellowship program, launch new programs for aspiring and novice chief nursing officers (CNO), as well as appoint a front-line nurse to the AONE board.

“One of the things I like to do is recognize that leadership doesn’t require a management title,” Dent said. “We have great nurse leaders across the country, so to be able to pull or draw upon what they’re doing, and sharing that with others, only strengthens our nursing leadership across the country.”

Dent will also stay busy in Midland as Midland Memorial Hospital implements a new electronic medical records system. Dent will help oversee the transition and continue his work as the senior vice president, COO and CNO. It’s a lot of work, but Dent said the knowledge he gained from the DNP program helps him stand tall in his profession.

“(The DNP) puts you on the same playing field as others, and it enhanced my credibility with colleagues, whether it’s at the senior level of nursing or working with my medical staff and partners,” Dent said. “The DNP provided me a framework to be able to execute on a lot of those actions and help me along.”

As a member of the first graduating class of 19 students, Dent said he still stays in touch with many of his classmates and attributes that strong sense of community to his success.

“It doesn’t end after you complete your DNP,” Dent said. “It just takes you to a different level. I think there’s a higher level of commitment and ownership, not only in your education, but in giving back to the nursing profession.”

Linda Lawson, DNP, RN, remembers the difficulty of stepping out of her comfort zone in the DNP program; it is something the faculty constantly ask of their students. But five years later as the first CNO at a new hospital in El Paso, she understands how valuable those experiences were.

“Looking back, I’m glad they did that,” Lawson said. “Follow (the professors’) recommendations, because it truly is when you get out of your comfort level that you start to grow.”

The Hospitals of Providence Transmountain Campus opened in January 2017, and Lawson said that, as the CNO, she had to start from the ground up. Whether it was the development of policies and procedures for the nursing team or where to place equipment in each room—even equipment as small as toilet paper holders—everything needed a plan.

She knew the job would be challenging from the get-go, but that is why she wanted the position in the first place.

“I really did seek this opportunity out because I wanted to be in the new facility. I wanted to set that foundation. I wanted to do this, and I needed to do it right. This was from the ground up, and I really don’t know if I would have these skills if I did not have my DNP.”

Lawson said she is excited to go to work each day, because she is excited to move forward with the hospital’s direction. As an assistant professor for the last three years, Lawson said she is excited to build a strong relationship between the new campus and the nursing school.

“I’m thrilled to be associated with the Transmountain campus and (TTUHSC),” Lawson said. “It’s giving back, and I love it. I loved my experience. I would do it again in a heartbeat.”



Linda Lawson, DNP, RN, NEA-BC

**Chief Nursing Officer,
Hospitals of Providence Transmountain Campus,
El Paso**

**Clinical Assistant Professor,
Gayle Greve Hunt School of Nursing**

**Robert Wood Johnson Foundation
Executive Nurse Fellow (2012)**

DNP Graduate: 2012



**Seth Stephens, DNP,
ACNP-BC, CCRN**

**Nurse Practitioner for Medical Quality,
Baylor St. Luke's Medical Center,
The Woodlands, Texas**

DNP Graduate: 2011

Seth Stephens, DNP, ACNP-BC, didn't just complete the required projects during his DNP program; he took them to the next level. Tasked with developing an intervention for patients with chronic diseases during his Chronic Disease Management course, Stephens designed a heart failure clinic for Baptist Hospitals of Southeast Texas in Beaumont, where he had hospital privileges while earning his degree.


Though it was not required of him, Stephens wrote a proposal for funding through the Texas 1115 Medicaid Waiver in hopes of making his design a reality. The waiver allows the state to expand Medicaid-managed care while preserving hospital funding.

"That was just something that I was quite passionate about," Stephens said. "My clinical area of expertise has always been in either cardiology or cardiovascular surgery. It was just a great opportunity for me to use that work that I had already started through the program at (TTUHSC) as a structure to request those funds."

His proposal was approved, and Stephens was able to build a hospital-based clinic in Beaumont.

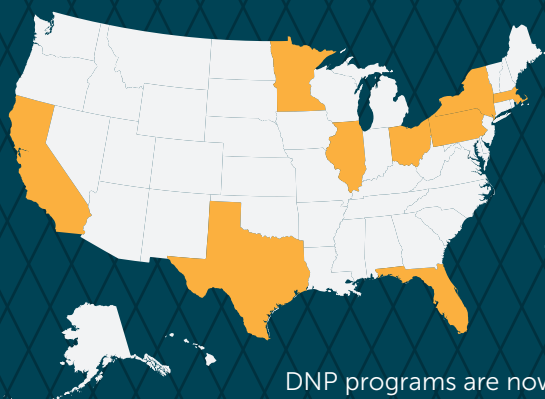
"Having not gone through the (DNP) program, I would not have even known where to start to write that proposal," Stephens said. "And that's not the only grant funding I've been awarded since leaving (TTUHSC)."

Stephens currently works at Baylor St. Luke's Medical Center, but he still credits his education and experiences in the DNP program for giving him more of a macro view of health care.

"I've been able to use the tools learned at (TTUHSC)," Stephens said, "to design interventions, treat large groups of patients and large populations of patients, and affect multiple individuals with one intervention, as opposed to just treating one patient at a time." 

Facts from the American Association of Colleges of Nursing

Schools nationwide that have initiated the DNP program are reporting sizable and competitive student enrollment.



DNP programs are now available in all 50 states plus the District of Columbia. States with the most programs (10 or more) include California, Florida, Illinois, Massachusetts, Minnesota, New York, Ohio, Pennsylvania and Texas.

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DNP programs are currently enrolling students at schools nationwide, and an additional 124 new DNP programs are in the planning stages.

From 2015 to 2016, the number of students enrolled in DNP programs increased from **21,995 to 25,289**. During that same period, the number of DNP graduates increased from **4,100 to 4,855**.



PREPARING FOR THE WORST

Disaster Drills Prepare
Emergency Responders
for the Real World

PROVIDED BY
TTUHSC EL PASO EXTERNAL COMMUNICATIONS
PHOTOS BY TOMMIE MORELOS

An active shooter is rampaging through a building while simultaneously setting it on fire.

Soon, victims are flooding the hospital. Many have gunshot wounds, others have suffered lacerations, and some are choking from smoke inhalation. All are panicked.

This illustrates the mock disaster drill that emergency medicine residents were surprised with in September. Their task was to save as many lives as possible.

“We do this at least every two years, mainly because we want to be ready when disaster strikes,” said Department of Emergency Medicine Professor Stephen Borron, MD, who coordinated the disaster drill. “We try to simulate disasters in an environment where everyone can make mistakes, but it doesn’t hurt anyone. This helps us learn from our mistakes and increases our preparedness.”

Borron is known for creating realistic disaster scenarios to prepare residents for what they may face in the real world. In the past, victim injuries have mimicked those in the news—like the shrapnel injuries that were seen at the Boston Marathon bombing. The scenarios are always large-scale, with mass casualties that usually overwhelm emergency responders.

Mock, also known as *moulage*, injuries are taken as seriously as if they were real. Two hours before this year’s surprise drill, students from the Gayle Greve Hunt School of Nursing (GGHSON)—who were charged with playing the victims—were applying makeup, fake wounds and charcoal to imitate burns. They also memorized their symptoms and rehearsed their characters. One student played a worried pregnant woman, terrified that her unborn baby had been injured. Another played an injured patient who was also drunk, causing a scene in the emergency room.

“It was absolutely helpful; simulation is one of the key parts of residency,” said Adam Villalba, MD, a third-year resident in emergency medicine who participated in the drill. “It’s something that you will always remember as a physician and can refer back to in the future. The mistakes that you make here in simulation are the most valuable lessons because you’re less likely to make them when you’re out actually performing them in real life.”



Department of Emergency Medicine Professor Stephen Borron, MD, left, who organized the disaster drill, monitors a resident as he prepares to help a patient who has trouble breathing.



Juan E. Rodriguez, EMT-P, an instructor from the Department of Emergency Medicine applies moulage, or mock injuries, to a nursing student. Gayle Greve Hunt School of Nursing students played victims during a mock disaster drill on campus.




Villalba was tasked with treating incoming patients at TTUHSC El Paso's Regional Simulation and Training Center, which was set up as a hospital. Other residents were dropped off at the scene of the crime to triage victims.

Nurses in the GGHSON also had the opportunity to test their skills. Those who were not playing victims and evaluating the medical care they received were paired with emergency responders to treat incoming patients at the hospital or directly at the crime scene.

"What was unique about the experience is that I was not expecting to work one-on-one with another doctor," said James Parker, a GGHSON student in his final year. "It was interesting to see how we could interact with each other to benefit the patient."

During the two-hour drill, residents and nurses encountered a plethora of drawbacks that they are also likely to face in the real world, including a shortage of blood and operating rooms.

"That's when our health care providers are really tested," Borron explained. "Their decisions at that point in time will affect whether patients live or die; it's up to them to apply what they've learned to achieve the best possible outcome." 



A patient is evaluated on a gurney before she is sent to a hospital. If the patient's condition is serious, she is given priority admission to the emergency room.



WHEN A DRILL BECOMES REALITY

For William Garcia, MD, (Resident '17) these surprise exercises were good practice. After completing his residency, he became an emergency room physician at West Houston Medical Center in Houston, Texas.

But less than two months after starting his new job, Hurricane Harvey hurled the city into chaos. West Houston Medical Center was one of the few hospitals that remained open; patients soon overwhelmed the hospital, with only three physicians on call.

Disaster mode kicked in.

"Primary care clinics closed; dialysis clinics closed; we had to really step up to the plate to make up for this influx of patients who needed help," Garcia said.

That's when skills Garcia learned at TTUHSC El Paso came into play. "As residents, we focused on triaging and evaluating patients to see who was a true emergency," he added.

Each day, up to 50 patients came to the hospital desperate for dialysis. However, the facility didn't have enough machines to provide everyone treatment, which meant Garcia and the team had to establish a protocol to see who needed dialysis the most. If patients didn't fit the standard, they were sent home or only given half of a full dialysis to stabilize.

"It was not easy to turn people away," Garcia said.

If Garcia learned anything at TTUHSC El Paso, it was that empathy is important in emergency situations like this; people need to feel safe.

"It's not an easy time for them or us," he said. "But you need to remain compassionate and understanding, whether you see 10 patients in a day or 35."

Despite the four-day madness, Garcia said he never lost confidence in his ability to treat the influx of patients.

"My residency training taught me to step up to the plate," he said. "While the whole situation may have been stressful, I felt very confident in how I was treating my patients."

Marking A MILESTONE

TTUHSC El Paso to Celebrate its Fifth
Year as a Stand-Alone Institution

BY DAVID PEREGRINO

PHOTOS PROVIDED BY TTUHSC EL PASO EXTERNAL COMMUNICATIONS

On May 20, 2013, Texas Gov. Rick Perry made it official: the TTUHSC El Paso campus would become a freestanding institution, charting its own destiny as the fourth university in the Texas Tech University System.

Five years later, TTUHSC El Paso is preparing to celebrate its stand-alone status in May. It remains the only health sciences center on the U.S.-Mexico border.

Let's take a look back.



2013: MOVING FORWARD AS AN INDEPENDENT UNIVERSITY

The Liaison Committee on Medical Education granted the Paul L. Foster School of Medicine (PLFSOM) full accreditation in February 2013, a reflection of the quality of education provided by the school and a fulfillment of state board requirements.

In May, the medical school graduated its 40-member inaugural class, which began studies in 2009 while the school was under provisional accreditation.

“This passage not only represents the achievements of our new physicians, but also validates the power of a shared vision from the community, for the overall good of our community,” said Jose Manuel de la Rosa, MD, MPH, (Medicine ’84) the Paul L. Foster School of Medicine’s founding dean (now vice president for outreach and community engagement).

Also in May, the Gayle Greve Hunt School of Nursing (GGHSON) received full accreditation of its baccalaureate degree program from the Commission on Collegiate Nursing Education. Three months later, El Paso officials broke ground on a new building for the school.

In December, 65 nurses from the GGHSON’s inaugural class graduated in a ceremony at the Plaza Theatre in downtown El Paso.

In May 2013, the Paul L. Foster School of Medicine graduated its 40-member inaugural class, which began studies in 2009 while the school was under provisional accreditation.

2014: WELCOMING NEW LEADERS

The year brought a wave of new leadership for the university. The Texas Tech University System Board of Regents selected Richard Lange, MD, MBA, as the founding president of TTUHSC El Paso and dean of the PLFSOM.

At an event welcoming him to the university, Lange shared his vision of TTUHSC El Paso becoming an essential part of the surrounding region.

“Our goal as a health sciences center is to achieve excellence in patient care, education and research and to lead our communities’ efforts,” Lange said. “We are most likely to achieve this by forging a healthy and supportive relationship with our hospital partners; forming a vibrant relationship with our community physicians; and fostering community support and participation.”

Peter Rotwein, MD, who specializes in endocrinology, was also selected as the university’s vice president for research.



Peter Rotwein, MD, above, and Richard Lange, MD, MPH, are welcomed to TTUHSC El Paso.

2015: A NEW HOME FOR THE SCHOOL OF NURSING

In February, the university officially opened the doors to a new home for the Gayle Greve Hunt School of Nursing, thanks in part to a \$10 million gift from the Hunt Family Foundation. Located directly across from the medical school, the new building offers 34,000 square feet of overall space; 12,000 square feet of simulation labs; four classrooms; and several collaborative learning spaces.

The Helix Garden installation, created by artists Elizabeth Billings and Andrea Wasserman, was unveiled in 2015 outside the Gayle Greve Hunt School of Nursing. It symbolizes the science of nursing and the art of caring for the El Paso community.



2016: MAKING REGIONAL HISTORY

The year brought a history-making announcement for health care in the Borderland. Thanks to a \$25 million gift from the Woody and Gayle Hunt Family Foundation and an \$8 million donation from the Paso Del Norte Health Foundation, approval for a study to establish the first dental school in Texas in nearly 50 years was granted to TTUHSC El Paso. The future Woody L. Hunt School of Dental Medicine will help alleviate a severe shortage of dental professionals in West Texas. According to the Texas Department of State Health Services, El Paso has only one dentist for every 5,000 residents, about half the state average of one per every 2,760.

TTUHSC El Paso President Richard Lange, MD, MBA; donors Gayle and Woody Hunt; and Board of Regents Chairman Rick Francis and Chancellor Robert Duncan celebrate the announcement of the Woody and Gayle Hunt Family Foundation's \$25 million gift in support of a dental school for West Texas.

In May 2017, TTUHSC El Paso broke ground on the \$83 million Medical Sciences Building II. The five-story, 219,000-square-foot facility will more than double the campus' research capacity.

2016-17: BUILDING THE RESEARCH BACKBONE

The university's education and research mission got a boost in 2016 when the Texas Higher Education Coordinating Board approved the addition of a third school to the campus: the Graduate School of Biomedical Sciences. Students in the Master of Science in Biomedical Sciences program participate in hands-on research related to prevalent diseases along the U.S.-Mexico border.

The groundbreaking for the Medical Sciences Building II was another recent milestone, with completion slated for 2019.




2018 AND BEYOND

When TTUHSC El Paso marks its fifth year as an independent university in May, the health sciences center will have much more to celebrate. Enrollment has grown steadily each year, from 40 students in 2009 to a record 670 in fall 2017. Combined with its 265 medical residents and fellows, TTUHSC El Paso is educating nearly 1,000 health professionals this academic year alone.

With every graduating class, with every interaction between patient and provider, the Texas Tech University System's vision for improved access to health care and the focus on treating and curing diseases affecting the region's population becomes clearer and clearer.

"The Texas Tech University System is known for identifying and addressing issues facing our state and nation," said Chancellor Robert Duncan. "Texas Tech University Health Sciences Center El Paso epitomizes this ethos with the unprecedented patient care, education and research they offer on the U.S.-Mexico border."

The foundation set firm, expect many more future physicians, dentists, nurses and health researchers to put down roots in El Paso and across the Borderland.

At five years, the history of TTUHSC El Paso has just begun. 

Caring for the C-SUITE

New program provides preventative health care options for corporate leaders



In 1968, Kenneth Cooper, MD, transformed the field of medicine with his emphasis on disease prevention, igniting the modern fitness revolution. He opened The Cooper Institute—now known as the Cooper Aerobics Center—and his research, involving more than 100,000 individuals, proved the importance of moderate exercise and proactive health management. Almost 50 years later, his work continues to transform how individuals and businesses approach health.

These concepts of proactive wellness are now offered through the TTUHSC Executive Health Care Program, which originated at the Permian Basin campus, with plans to expand to Amarillo and Lubbock campuses. Currently in the testing phase, the program has the potential to change how company executives manage their health, leading to more efficient leadership.

Program participants are scheduled for a series of tests, including a computed tomogram (CT), cardiac stress testing and lab work. The session concludes with an in-depth consultation with the program's managing physician, Timothy Benton, MD, (Medicine '94) regional chairman of the Department of Family and Community Medicine in the School of Medicine at the Permian Basin.

"This program is a great way to inspire people to take care of themselves so they can take better care of their companies," Benton said. "It is a whole-person assessment, and the report we provide is very comprehensive. We hope the patient will take the information, look at the nutritional suggestions, add exercise, reduce stress and become healthier."

Cynthia Jumper, MD, MPH, (Resident '91; Medicine '88) TTUHSC vice president for health policy, sees the program as a way to start looking at population health and making an impact.

"As physicians, many times we see patients only through disease management," she said. "This program allows us to become involved with these patients to prevent disease. This is a shift in how some practice medicine, but finding ways to avoid disease is what public health is about."

Executive health programs are offered across the nation, reflecting a need for companies to help their leaders stay healthy.

In an excerpt from the September 2009 Harvard Business Review, Anthony Komaroff, MD, said, "It makes good sense for companies to protect their top talent. Sometimes, those who run the show can't find the time to mind their health. With an eye toward prevention, these exams attempt to accommodate busy schedules while supporting the long-term wellness and productivity of a firm's key players."

"The life of a corporate leader isn't easy," said Kiko Zavala, TTUHSC executive health project manager and former exercise physiologist at The Cooper Institute. "Corporate leaders deal with a high level of stress. Their careers may require long evenings, miles of travel and little time for exercise. This program will give them information so they can make informed decisions about their health

When employees see the CEOs taking care of their health, they may want to do it as well.

to do their jobs more efficiently. Also, when employees see the CEOs taking care of their health, they may want to do it as well."

In the landmark Cooper Clinic Longitudinal Study, which began in 1970, researchers found that moderate exercise—a collective 30 minutes of activity most days of the week—will decrease a person's risk of dying from any cause by 58 percent. The study also concluded that moderate fitness levels will increase a person's lifespan by six to nine years. These facts are not lost on Tedd L. Mitchell, MD, TTUHSC president and an internal medicine physician.

"The reality of health is that good habits can extend our lives," he said. "Based on a person's age, sex, lifestyle habits and medical history, this program can determine risks so they can be addressed early and lay the groundwork for a longer life. This is a way to improve quality of life."


Mitchell, who worked at the Cooper Clinic prior to joining TTUHSC, sees this program as a snapshot of current health status.

"The extensive report the program generates will help physicians see what could be happening in the future for these patients," he said. "I feel the most important aspect of the examination is the one-on-one consultation with the managing physician. It's an in-depth walk-through of the patient's history, which is hard to do during a regular office visit."

In addition to providing a much-needed service for area patients, the executive health program will provide enhanced learning opportunities for medical students, residents and other health professionals, Benton said.

"Establishing this program allowed us to create an educational environment for family medicine students and residents to participate in a different family medicine offering," he said. "It widens the range of practice for these students and creates opportunities for them to care for the whole spectrum of a person."

Mitchell sees the program as a way to not only change the health status of corporate leaders, but also to extend TTUHSC service.

"Our system is built on education, research and providing service to the people of this area. This program provides new service and educational opportunities and fulfills our mission." 

BY JO GRANT LANGSTON



24 HOURS

BEFORE TULSA

MOTORCYCLE CRASH LANDS CALIFORNIAN IN THE HANDS OF THE TTUHSC TRAUMA TEAM



On a Thursday morning in mid-September, Laurentius Harrer and three of his “dad” friends from Malibu, California, began what they anticipated as an uneventful motorcycle ride across Oklahoma. Within minutes, plans changed, and Harrer ended up in Lubbock, Texas, instead.

BY DANETTE BAKER | PHOTOS PROVIDED BY LAURENTIUS HARRER

A WRECKED CELEBRATION

Fifty-year-old Harrer, a native of Neufahrn in Niederbayern, a small municipality in the district of Landshut in Bavaria in Germany, retired in spring 2017 from a rewarding career as a portfolio manager with Capital Group. To celebrate, he and his buddies decided to tackle the Trans-America Trail, a 5,000-mile, off-road motorcycle adventure from west to east coast. “(It’s) NOT for everyone. It takes a rider with a ‘quest for adventure’ and a special ‘love’ for a motorcycle,” according to the website. An apt experience for Harrer, a self-described adventurer.

Some people ride the trail in 200-mile, back-to-back stages—the average distance between designated waypoints. Harrer and his buddies decided to break the ride into three separate trips to accommodate everyone’s schedule. Earlier this summer, they traversed the backroads from Malibu to Denver, Colorado, and then stored their motorcycles before flying home. In early September, they returned to Denver for the second leg. Coming out of majestic mountains onto the Oklahoma Panhandle was quite a shock, Harrer said. With the drastic change of terrain and views, the foursome opted to make the 337-mile asphalt route from Guymon to Tulsa in one day. From there they would travel on to Memphis, Tennessee, ending this leg of the trail.

With his GPS locked on a local coffee shop, Harrer was leading the group through Guymon about 8 a.m. Sept. 14, when he collided with a pickup truck



Laurentius Harrer and his friends at the Imogene Pass before entering Oklahoma.

in an intersection. The accident catapulted Harrer over the handlebars of his motorcycle and the hood of the pickup truck.

“I have the flight in perfect memory,” he explained from his Venice, California, home six weeks after the accident. “I didn’t land on my feet, but I sat up and did my inventory. Thinking to myself, ‘Oh, sh** this just happened. This is good, I’m OK. And then oh, f***! Hip hurts like hell, and I can’t get up.’”

As his Triumph Tiger 800 XE adventure bike t-boned the pickup, Harrer’s pelvis slammed into the gas tank before he became airborne, resulting in an open-book pelvis fracture—a life-threatening injury because of the potential damage to blood vessels and nerves, according to information on The American Association for the Surgery of Trauma website. In such injuries, the front of the pelvis opens flat, tearing the ligaments that hold the pelvic bones together. Large arteries are associated with these ligaments and, if torn, can cause massive bleeding.

Thankfully, Harrer was wearing “the best protection money can buy,” he said, and suffered no internal injuries. However, the emergency room physician was suspicious of bladder damage, calling for Level 1 trauma care. Oklahoma City was the initial choice, but they were diverting because they were at full capacity, said Harrer. “And then the doctors mentioned Amarillo and Lubbock.”

“I had never heard of either and was like, ‘Come again?’ I called my friends in the doctor world here in California; I have some pretty interesting friends, and they are high up in different hospitals here, and asked what I should do. I said, ‘Can I get airlifted straight to Los Angeles and do the procedure there?’ Nobody would take the risk because of the bladder thing. Seems that only Lubbock had the people that could do that.”

THE RIGHT TIMING

“The people” were TTUHSC’s trauma team.

By 2 p.m., six hours after the accident, Harrer was at UMC Health System, a Level 1 Trauma Center, where TTUHSC surgeons care for a spectrum of injuries including trauma, critical care, burns, vascular surgery and facial trauma.

“It’s critical that someone who is injured (whether burns or trauma) severely get to definitive care quickly,” said Sharmila Dissanaïke, MD, (Resident ’06) professor and Peter C. Canizaro Chair for the School of Medicine Department of Surgery. “The time between arrival to a hospital and surgery is probably the No. 1 thing that determines if that person is going to live or die.

“So, having expertise 24/7 here, provided by our TTUHSC faculty, clearly makes a big difference for these patients.”

One of the benefits of the UMC Level 1 Trauma Center being staffed by TTUHSC experts, Dissanaïke said, is that the team delivers research-backed care. For example, Dissanaïke’s research has led to hospital protocol for starting tube feedings in burn patients. Seven principal investigators on the trauma team lead a variety of study areas, including well-known work in prevention and treatment of wound infections.



EDITOR’S NOTE Just after the first of the year, Laurentius Harrer was cleared by his orthopedist at Cedars-Sinai Medical Center in Los Angeles to resume full activity. He has about five months to regain his strength and dexterity before the foursome tackle their ride from Tennessee to New York—their final leg on the Trans-America Trail.

 Read about other life-saving work by the TTUHSC trauma team:

A farm accident on the South Plains led to life-saving measures by an emergency rescue and trauma team.


dailydose.ttuhs.edu/2017/october/lub-traumacare.aspx

Four victims injured in a New Mexico shooting receive life-saving care.

dailydose.ttuhs.edu/2017/august/lub-nr-clovis-victims.aspx

“There is still a lot of work to be done, and there are a lot more advancements we could make if there was more research funding,” Dissanaïke said. “Everyone focuses on cancer or heart disease, which are both very big topics in the media and critical health issues; but in reality, among people younger than 45, trauma is the No.1 cause of death.”

Harrer considers himself fortunate that Lubbock was the “only” place that could care for his injury. Within 24 hours of arrival by air ambulance, the potential bladder damage had been ruled out, and Mark Jenkins, MD, an orthopedic trauma surgeon and School of Medicine Residency Program Director, performed surgery to correct Harrer’s pelvic injury. Harrer later met fellow Californian, Steven Brooks, MD, (Resident ’11) assistant professor of surgery and medical director for the John A. Griswold Trauma Center at UMC.

By Saturday morning—two days after Harrer arrived in Lubbock—he and his partner, Joanna Kaylor, who had flown in from their mountain home in Mammoth, California, were on a charter plane back to Venice. “Nothing against anyone in Lubbock,” Harrer said. “I could not have asked for better care. It was a great experience from the check-in to pre-op and post-op. The personalized attention I got from the surgical staff and the junior surgeons (residents) and from Dr. Jenkins was great! But I was stable, so we just wanted to go home.” 



STRONGER *Together*

TTUHSC Alumni
Association Demonstrates
the Power of Unity

By Kara Bishop

There's nothing like belonging to a family and sharing a bond that provides inspiration, loyalty and connection to fellow like-minded people. Maybe that's why the TTUHSC Alumni Association has been such a success. After launching the alumni association in November 2015, the alumni staff alongside the National Advisory Board, have been working hard to build a network of TTUHSC health professionals; and according to Sissy Hinojos, MPAS, PA-C, (Health Professions '12) a family medicine physician assistant with Texas Oncology in Odessa, Texas, they're succeeding.

"I've been a member since the beginning, and the connection I feel with fellow graduates has been a great experience," Hinojos said. "I feel a sense of family with my fellow alums and know that I can reach out to any of them for services or mentorship. It makes me proud to be part of the TTUHSC family, because it's all about increasing medical care access to the people of Texas, and what better way to do that then through your school even after you've graduated?"



Alumni gather at the San Antonio alumni reception in conjunction with the American Physical Therapy Association conference.

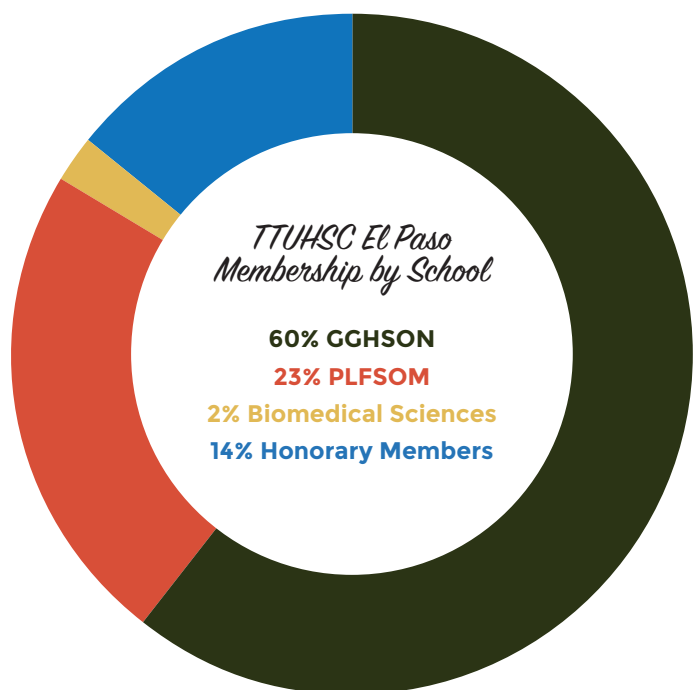
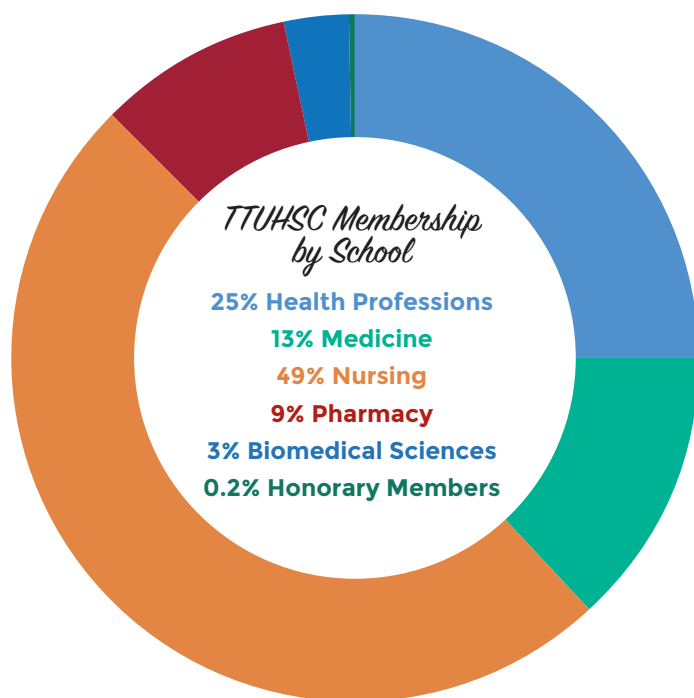
TWO ENTITIES, One Association

This family is swiftly permeating the state of Texas and beyond, obviously aided by the inclusion of two entities under the same umbrella: TTUHSC and TTUHSC El Paso.

“Connecting with people from Lubbock and Dallas is really nice, especially since I graduated from TTUHSC El Paso,” said Jason Ross, MD, (PLFSOM '13) a radiology resident with the University of Texas Medical Branch in Galveston, Texas, and member of the TTUHSC Alumni Association National Advisory Board. “Having TTUHSC and TTUHSC El Paso in the same alumni association really expands the geography of networking. I love the steps that our association is making to reach out and build bridges between campuses and towns in Texas. I can't express how much benefit I get from the networking opportunities the alumni association provides between other schools, campuses, programs and geographic areas.”

TTUHSC and TTUHSC El Paso work together to bring incredible opportunities to their respective alumni communities. After all, everyone is working toward a unified goal.

“We are all Red Raiders and each institution brings a different perspective,” said WH Harris, DNP, (GGHSON '13) charge nurse for St. David's Healthcare in Austin, Texas, and member of the national advisory board. “By combining resources we are able to create a larger network as well as formulate different and unique ideas to engage our alum.”



"Our alumni want to connect with each other, so we've been working hard to make sure that happens through various opportunities."

It's All About **THE CONNECTION**

No matter the TTUHSC institution, the mission of the alumni association thus far has been to bring alumni together to further medical progress and discovery in Texas.


"It doesn't matter if people have graduated from TTUHSC or TTUHSC El Paso, we want to engage the entire population," said Greg Thompson, MBA, (Health Professions '03) regional vice president and chief operating officer of the Medicaid division for Amerigroup in Texas, and chairman of the TTUHSC Alumni Association National Advisory Board. "We want to attract people where they are and to help leverage those relationships. We want a young graduate who ends up at MD Anderson for his or her residency to be able to connect to a fellow TTUHSC or TTUHSC El Paso alum who has been working there five to 10 years for that mentor experience. This has been one of our main missions since we launched."

The inclusive nature of the TTUHSC Alumni Association transcends even further, according to Kristopher Zepeda, PharmD, (Pharmacy '04) division manager for Seattle Genetics in Lubbock.

"The TTUHSC Alumni Association is a fully networked group that allows for alumni to

stay in contact with colleagues and the health sciences center, regardless of undergraduate affiliations."

Julie Doss, JD, senior director of Alumni Relations, said the TTUHSC Alumni Association networking events have been very successful. "Our alumni want to connect with each other, so we've been working hard to make sure that happens through various opportunities."

And the connection speaks for itself, illustrating a family unit who supports and encourages each other to accomplish the main goals and objectives that benefit the entire group. Therefore, it seems apparent that the collaboration between TTUHSC and TTUHSC El Paso is the catalyst behind a more cohesive group of alum, and, together, they make one big happy family. 

friends we'll miss

J. Ted Hartman, MD, died Feb. 2, 2018. He served as dean of the School of Medicine from 1982 to 1989. Hartman joined the school in 1971 as a founding faculty member and chair of the Department of Orthopaedic Surgery.

Gifts in memory of or in honor of are routed to the desired location of the donor through the TTUHSC Office of Institutional Advancement, 3601 Fourth Street, Stop 6238, Lubbock, Texas 79430.



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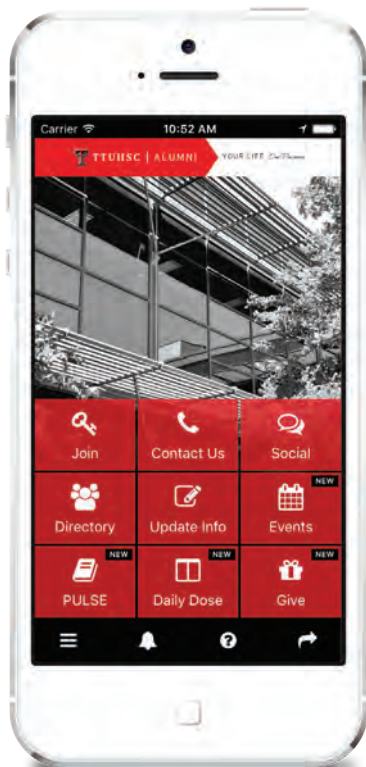
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EVOLVING *Connections*



The TTUHSC Alumni Relations office is proud to offer another communication network for alumni.

The TTUHSC Alumni App provides users with access to news resources, including Pulse magazine, social media—you can follow all the alumni accounts—as well as membership options to the TTUHSC Alumni Association straight from your mobile device.

The app also boasts a mobile-friendly directory for the 20,000-strong network, providing alum with convenient networking opportunities. Everything is safe and verified through alumni identification number and last name. The app was launched in October and is available to all TTUHSC alumni.

Julie Doss, JD, senior director of the TTUHSC Alumni Relations office, said the mobility of the app is a major benefit to alumni.

“The TTUHSC Alumni Association mobile app is a great way to keep our alumni connected while on the go,” she said. “Alumni can learn about social events, update their contact information, and even join the Alumni Association from straight from their phone. We’re excited about the possibilities this brings our alumni.”

Jeff Barnhart, MSCPM, FACHE, (Health Professions ’13) chief executive officer for the Deaf Smith County Hospital District, agreed.

“The (TTUHSC) alumni app is the perfect way to stay connected to campus happenings,” he said. “I love this app!”

The app can be downloaded on iTunes and Google Play. Enhance your networking opportunities and strengthen your alumni connection with this new tool.

STETHOSCOPES FOR STUDENTS



Few tools of the trade are more vital than the stethoscope. School of Medicine alumni, support an incoming student by giving to the Stethoscopes for Students program.

Visit ttuhsc.edu/alumni/stethoscopes.aspx to learn more



Allphin



Attaya



Griswold



Islam



Martincheck



Moon



Paullus



Spiegelberg



Tarbox



Thompson

Awards & Accolades

ALLAN ALLPHIN, MD, FACS, (Medicine '87) a physician for Mercy Clinic Ear, Nose and Throat in Springfield, Missouri; and **DAVID MARTINCHECK, MD**, (Resident '11) a physician for Texas Pain Consultants in Waco, were recognized by The International Association of HealthCare Professionals in The Leading Physicians of the World publication.

EMAN ATTAYA, MD, (Medicine '05) associate professor of neuroradiology in the School of Medicine, was elected to the Texas Medical Association Council on Health Promotion. She also published a children's book, "Have You Ever Seen a Sunset Before?" The book can be purchased on Amazon.

JOHN GRISWOLD, MD, (Resident '86) Department of Surgery Chair Emeritus and medical director of the Timothy J. Harnar Burn Center, was the recipient of the Lubbock County Medical Society's prestigious 2017 Hippocratic Award for his dedication to the community.

SAMEER ISLAM, MD, (Medicine '08) gastroenterologist with Physician Network Services in Lubbock, was elected to the Texas Medical Association Council on Practice Management Services. He also received the Lubbock County Medical Society Young Physician Award.

MICHAEL D. MOON, PHD, (Nursing '87) associate professor at the University of the Incarnate Word Ila Faye Miller School of Nursing and Health Profession in San Antonio, and former TTUHSC School of Nursing faculty, received the National Emergency Nurses Association 2017 Nurse Educator Award.

CP PAULLUS, MD, (Medicine '05) was listed as a 2017 "Texas Rising Star" in Texas Monthly. Rising Stars recognizes physicians who have experienced professional success early in their careers and have earned the confidence and high regard of their peers. Paullus is a neurosurgeon for Southwest Neuroscience and Spine Center in Amarillo, Texas.



Vasudev



Wells



Zeitouni

JESSICA SPIEGELBERG, FNP, (Nursing '12) was honored as the Nurse Practitioner of the Year by the South Plains Nurse Practitioner Association. Spiegelberg is an associate nurse practitioner with the School of Medicine Department of Psychiatry.

MICHELLE TARBOX, MD, (Medicine '05) assistant professor of dermatology in the School of Medicine, was appointed to the Texas Medical Association Committee on Membership.

MARK THOMPSON, MD, (Medicine '95) was named a 2017 Top Doctor in Kansas City, Missouri. Top Doctor Awards honors health care practitioners who have demonstrated clinical excellence while delivering the highest standards of patient care.

REJEESH VASUDEV, MD, FACP, (Resident '10) a Nephrologist at BCS Kidney Center in Bryan, College Station, Texas, has been named a 2018 Top Doctor by Top Doctor Awards.

BRANDON WELLS, MPAS, PA-C, (Health Professions '09) received a Certificate of Added Qualifications in orthopaedic surgery from the National Commission on Certification of Physician Assistants.

NAWAL ZEITOUNI, MD, (Medicine '96) was appointed to the Texas Medical Association Committee on Child and Adolescent Health.

TTUHSC El Paso Hosts Alumni Night

TTUHSC El Paso alumni were special guests one evening during the TTUHSC El Paso's annual summer film series, Red Raider Reels. They and their families enjoyed a free screening of the live-action fantasy "Beauty and the Beast," pizza and chances to win Red Raider swag. In addition, proceeds earned from popcorn sales benefitted TTUHSC El Paso's Student Excellence Fund, which supports scholarships and other campus services and initiatives.

Red Raider Reels, started in 2015, invites the community to enjoy the campus and interact with students and staff. The 2017 series also included screenings of "Sing," "A League of their Own," "Moana" and "Dr. Strange."



Nursing Alum Helps Improve Hospital's Quality of Care

In a hospital setting, the time it takes to provide pain relief is an important measure of how well the emergency department is performing.

"The clock starts ticking as soon as a patient hits the emergency room," explained Cory Loose, BSN (GGHSON '16). "As soon as pain medication is administered, the clock stops."

Loose, an emergency room nurse at the University of Iowa Hospitals and Clinics (UIHC) in Iowa City, Iowa, recently reviewed how his own hospital was performing against this measurement.

Loose specifically examined how long it took patients with arm or leg fractures to receive pain relief. After collecting hospital data, he found that the median patient waiting time for pain medication was 45 minutes. That left room for improvement; the national median is 50 minutes.

"Reducing the amount of time patients experience pain is an obvious necessity," Loose said. But its delay has even bigger consequences.

Evidence shows that acute pain is associated with the development of chronic pain. That means effectively managing sudden pain after trauma can reduce a patient's lifetime risk of pain.

To avoid these types of cases, Loose provided a series of recommendations to help UIHC cut its time. One key recommendation was to establish nurse-implemented order sets, specific instructions for nurses based on a patient's initial assessment. These orders can enhance the workflow in the emergency department and reduce clinical errors.

"Cory's research of this core measure has given us a better understanding of what data are collected and how we can improve our care of the patient and provide better patient outcomes," said Barbara Schuessler, MSN, MBA, associate director of nursing in emergency medicine at UIHC. "Our next step will be to incorporate his findings into education for our staff. In doing so, our patients will have less pain and potentially a superior outcome than before."

After the recommendations are implemented, the UIHC emergency department will include Loose's research as part of its application for a Lantern Award. The national award is highly coveted for its recognition of emergency departments that incorporate evidence-based practice and innovation. UIHC received the Lantern Award in 2016.

THE YEAR IS 2019.

TTUHSC CELEBRATES ITS 50TH ANNIVERSARY.

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1 Alumni gather at the Grotto Downtown in Houston to celebrate the 15th graduating class of the Master's of Athletic Training program. Follow the TTUHSC Alumni Association on Facebook for details about upcoming receptions. **2** Lubbock media visit TTUHSC for "Media Day" to learn about the impact of philanthropy in fulfilling the university's mission. **3** TTUHSC students volunteer at the second annual "Day of Service" event. In all, 241 students volunteered with 18 non-profit organizations in five cities. **4** Incoming TTUHSC medical students pick up their scrubs and stethoscopes at the 2017 Scrub Party. **5** Students from TTUHSC at Abilene and local colleges and universities prepared for real-life scenarios during Trauma Day, hosted by TTUHSC. The simulated learning experience placed students in high-pressure situations, treating manikins and standardized patients (actors). **6** TTUHSC and TTUHSC El Paso alumni attend the 2017 official tailgate hosted by the TTUHSC Alumni Association. **7** The Paul L. Foster School of Medicine officially welcomed its ninth class of medical students in July. The 103 future doctors in the class of 2021 are part of TTUHSC El Paso's largest enrollment yet. **8** TTUHSC El Paso unveiled new shuttle wrap designs that pay homage to its three schools: the Paul L. Foster School of Medicine, Gayle Greve Hunt School of Nursing and Graduate School of Biomedical Sciences. **9** Gayle Greve Hunt School of Nursing students began their first clinical rotations in July at El Paso's newest teaching hospital, The Hospitals of Providence Transmountain Campus. **10** The Third Annual Hearts for Sparks Golf Classic was held in August. The event benefits TTUHSC El Paso's Medical Student Run Clinic, which provides free health care services to the Sparks community.



DAVID FISHMAN, MD

Professor of Obstetrics and Gynecology, Weill Cornell School of Medicine

Cancer Center Director and Department Vice Chair of Obstetrics and Gynecology, New York-Presbyterian/Queens, Queens, New York

Graduate: 1988

CHOOSING TTUHSC: Coming to Lubbock, Texas, from Boston, Massachusetts, may have been a big step, but David Fishman, MD, was driven to succeed in his chosen field. "I decided to come to TTUHSC primarily because of Ralph Anderson (former associate dean of clinical affairs in the School of Medicine and professor in the department of obstetrics and gynecology)," Fishman said. "He really understood what I was trying to do and gave me an individualistic education. It was more of an apprenticeship than medical school and truly a unique experience. Dr. Anderson was and will always be one of my heroes, and I owe everything to him and the Texas Tech University Health Sciences Center."

FROM TECH TO YALE: Fishman said his education from TTUHSC was world-class and helped him move on to Yale for his fellowship and residency. "I believe I was the first and only person from TTUHSC to be accepted at Yale for residency, and TTUHSC had a lot to do with that."

His education equipped him to focus on understanding the process of tumor metastases. "Ovarian cancer is the most deadly of all gynecologic malignancies, so I've been researching the process of how ovarian cancer spreads and how it becomes resistant to medications for many years, now. I've been fortunate to have continuous NIH funding for this project since 1996."

MOLDING THE FUTURE: "It's amazing to collaborate with brilliant minds all over the world to understand ovarian cancer, as well as bringing in clinical tools to help people today and in the future," Fishman said. "I believe we have been part of the giant steps forward in the progress of medicine, and while I don't believe I will win a Nobel prize for my work, I know I'll be in attendance when some of my collaborators do."

BY KARA BISHOP

CYNTHIA GARZA MEISSNER, MD

Child and Adolescent Fellow, Department of Psychiatry

Texas Tech University Health Sciences Center El Paso, El Paso, Texas

Graduate: 2014

CHRIS ESPINOSA

THE CASE FOR MEDICINE: Cynthia Garza Meissner, MD, never realized becoming a doctor was an option, but her inspiration was kindled while working as a trial attorney. Meissner often used physicians for expert testimony—a psychiatrist to discuss the mental status of a schizophrenic WWII veteran or a radiologist to explain the path of a bullet through a body.

Meissner was responsible for the medical history of one case, which fueled her passion for psychiatry. It involved a mother of seven, charged with murder and child abuse, who was diagnosed with Munchausen syndrome, a disputed illness where a person feigns mental conditions to gain attention.

CAREER SWAP: Leaving a law career to pursue medicine was not an easy decision, but Meissner felt that numerous experiences in her life had been preparing her for this new path.

“Growing up poverty-stricken in a rural Texas border town taught me about service above self,” she said. “My struggling family was often fed by the kindness of church members or teachers. It seems natural for me to continue to repay these gifts through a life dedicated to others.”

BOUND TO THE BORDER: Meissner grew up on the border in Harlingen, Texas. The diverse lifestyle of the region attracted Meissner to the Paul L. Foster School of Medicine.

A member of the inaugural class, the alumna is proud to see how far the school has come.

“I was never exposed to doctors growing up; maybe that’s why I never considered medicine an option early on,” she said. “I am glad children in El Paso get to see this medical complex growing right before their eyes so that they can know the possibilities.”

BY TTUHSC EL PASO EXTERNAL COMMUNICATIONS



ILKA RATSAPHANGTHONG, PHARM.D

Pharmacy Clinical Manager

Methodist Medical Center, Dallas, Texas

Graduate: 2002

METHODIST HEALTH SYSTEM

SOWING SEEDS: Growing up as a nurse's daughter, Ilka Ratsaphangthong, PharmD, observed—and was impressed by—her mother's clinical expertise and how she positively impacted the lives of her patients, especially as an oncology nurse. "Throughout my childhood, I loved hearing about how she helped and comforted patients and their families," she said. In college, Ratsaphangthong worked as a part-time pharmacy technician in a busy retail pharmacy.

CULTIVATING THE SOIL: Influenced by her mother and a group of dedicated pharmacists, Ratsaphangthong decided a career in pharmacy was the best way to combine her interest in math, biology and chemistry with the passion to serve others in a health care setting.

As a student, she discovered her professors and preceptors shared the same passion for teaching students and helping patients that she observed in her mother and her pharmacy co-workers. Ratsaphangthong also helped the School of Pharmacy establish a chapter for the national Phi Delta Chi pharmacy fraternity. "Through that experience, I learned a lot about collaboration, loyalty, trust, responsibility and leadership," she added.

REAPING THE HARVEST: As director of pharmacy at Methodist Dallas Medical Center and its residency program director, Ratsaphangthong is tasked with elevating and extending pharmacy services. Like many others working inside the nation's current health care environment, she is expected to provide high-quality care without compromising efficiency, cost, patient experience or patient safety. It can be a daunting task at times, but Ratsaphangthong said she has supportive colleagues and mentors who help her discover practical and creative strategies to meet this challenge, just as she did in pharmacy school.

"I enjoy seeing the positive impact of pharmacy services along the entire continuum of care," she said. "Receiving compliments from other Methodist Health System health care providers and leaders about our pharmacist and technician performance gives me great satisfaction."

BY MARK HENDRICKS



SARAH YOKUM, MS, CF-SLP

Clinical Fellow

Baylor Scott & White Medical Center, Waco, Texas

Graduate: 2017, 2015

THE ROAD TO SPEECH THERAPY: Sarah Yokum's first exposure to the world of speech therapy came at a young age when her grandmother was diagnosed with Parkinson's disease.

"When I told her I loved her, she never responded," said Yokum, MS, CF-SLP. "It was hard for me to understand what she was going through. When it came time to think about what I wanted to do in life, I realized that speech therapy encompassed all three of my interests: education, service and medicine."

TRAINING SAVES LIVES: Yokum had the opportunity to put all three into practice recently when a traumatic situation arose where she worked to save a non-responsive patient.

"We were required to take CPR training our first year as grad students," Yokum said. "Everything about my experience in the speech, language and hearing sciences department was hands-on. They really pushed us to apply our knowledge, so when codes were called from the patient's room I happened to be near; I didn't hesitate. The team saved that patient's life, and thankfully, my education was immersed in teamwork skills, which further enhanced my ability to help that patient."

A DESIRE TO HELP: Inspired by a lifetime of speech therapy experiences, Yokum made an important discovery.

"I have come to realize that being an speech-language pathologist isn't about fixing people, because they are not broken," she said. "It is about being in the thick of it with your patient during one of the hardest moments of their lives and aiding them in regaining a new normal. To aid them in establishing communication of some form so when their loved one says, 'I love you,' they are able to reply."

BY KARA BISHOP

LINDSAY SCHAUM, BSN, RN

Charge Nurse

UMC Health System, Lubbock, Texas

Graduate: 2015



FAMILIAL INFLUENCE: Lindsay Schaum, BSN, RN, knew she wanted to be a nurse when she was 14 years old. After watching her mother and grandfather receive medical care in the hospital, she felt inspired to help others in the same capacity.

It is a decision she is still proud of to this day.

"I really do love my job," Schaum said. "It can be long and tiring, but I absolutely love what I do."

PATIENT-CENTERED TEAMWORK: Originally from the Dallas area, Schaum fell in love with the Lubbock community after attending TTUHSC. Upon graduating, she accepted a position with UMC Health System in the cardiovascular and cardiac intensive care unit, where she currently works as a charge nurse and staff nurse.

Schaum helps provide personalized care to patients, many of whom come to the unit after surgery. Because the patients cannot always leave the intensive care unit, Schaum assists with bedside procedures that might normally be done elsewhere in the hospital. She also coordinates the care between the different specialized teams of physicians.

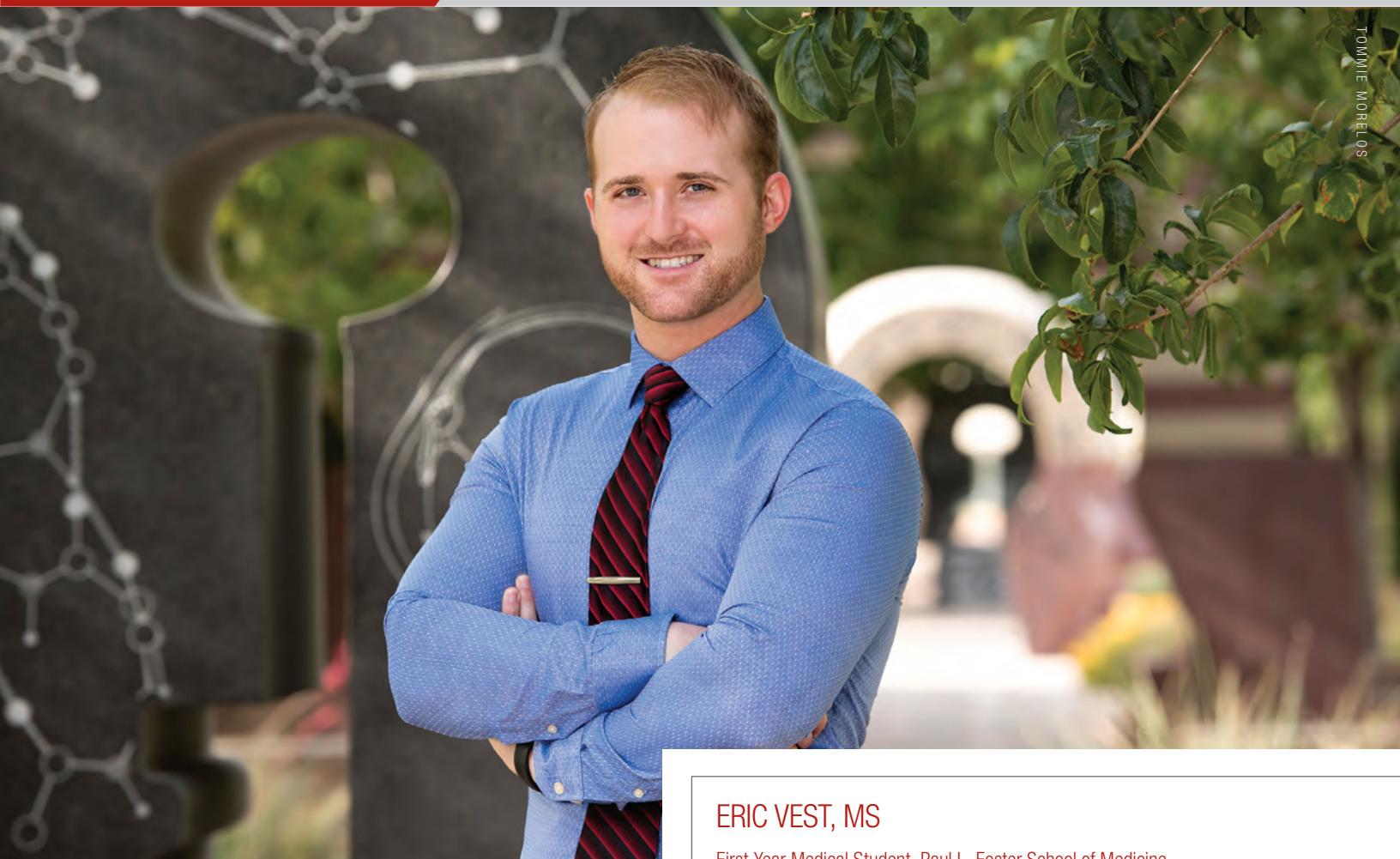
"There's a lot of teamwork that goes into each patient and the care the patient receives," Schaum said.

LOVE, LUBBOCK: Seeing the same patients for multiple days at a time gives Schaum the opportunity to build strong relationships with them and their families, which she loves.

"I like being there to help them and to hopefully influence them in such a way that I've changed their life," Schaum said.

When Schaum isn't working, she takes time to take care of herself by going to the gym, running errands or playing with her two dogs, Wyatt and Eleanor. She is also earning a master's degree through TTUHSC in nursing education with plans of graduating May 2019.

BY HOLLY LEGER



ERIC VEST, MS

First-Year Medical Student, Paul L. Foster School of Medicine

Texas Tech University Health Sciences Center El Paso, El Paso, Texas

Graduate: 2017 (TTUHSC)

EARLY START: He's been at the gym for hours. His workout is done and his clients are gone. It's time to call it quits. Back in his black Ford Mustang, Eric Vest's backpack and lab coat are in the passenger's seat where he left them at 4 a.m.

His day isn't finishing—it's just starting.

"At this point, my mind is open to all of the possibilities that can happen at school," Vest said. "I don't have anything resting on my shoulders; I'm ready to grow mentally."

NO PAIN, NO GAIN: During his time as a GSBS student, Vest served as president of the Student Government Association (SGA). Before graduating, he knew he wanted one more challenge.

"Growth only happens when you get out of your comfort zone," he said. "This is true for the gym as well as how you want to grow as a person. I went into my final year knowing I had to give it my all."

WORKING TOGETHER: From supporting new student organizations to presenting to the Texas Tech University System Board of Regents, Vest credits much of his ability to work effectively with others to the experience he received as SGA president.

"You learn the ins and outs of the university," Vest said. "Even amongst the colleges, you'll notice personality differences. I love a nurse's flair. Med students are notoriously logical. GSBS students have limitless possibilities of the mind."

Now, Vest is a first-year medical student at the Paul L. Foster School of Medicine. His love of sports has influenced his health care education so much that the self-proclaimed early-bird and workout fanatic has a clear idea for where the next few years will take him—sports medicine or orthopaedic surgery.

BY TTUHSC EL PASO EXTERNAL COMMUNICATIONS

**MONICA ARELLANO, BSN, RN**

Emergency Room Nurse

The Hospitals of Providence East Campus, El Paso, Texas

Graduate: 2012

BORDER ROOTS: Monica Arellano, BSN, RN, may not have been born in El Paso, but for the Juárez, Mexico, native, the border city is definitely home.

Growing up in Juárez, Arellano became interested in medicine at a young age, inspired by her brother, who attended Juárez's Instituto de Ciencias Biomédicas.

DETERMINATION: Arellano eventually married, moved across the border to El Paso and started a family. In 2007, on her twins' first birthday, Arellano's husband persuaded her not to put off her education any further. "I told him, 'Now that we have kids, I want to wait until they are ready to go to school full time.' He said, 'Oh, no! You are going tomorrow. End of discussion.'"

Arellano seized the opportunity. She joined the first cohort of students at the Gayle Greve Hunt School of Nursing.

"As students, we were treated like colleagues," she said. "The school's philosophy of field work made us feel like we were there because we were smart enough and deserved to be. That gave me a lot of confidence."

Arellano credits these immersive experiences—and hard work—with the confidence she has as a nursing professional today.

CULTURAL UNDERSTANDING: After graduating, Arellano decided to stay in El Paso to serve the border community she had grown to love, seeing a genuine need for bilingual health care workers.

Arellano often sees patients confused about their medical care because of the language barrier between them and their doctors. She strives to bridge this language gap whenever possible.

Arellano is currently pursuing a Master of Science in Nursing through TTUHSC's online Family Nurse Practitioner track. She expects to graduate in May.

BY RACHAEL PAIDA



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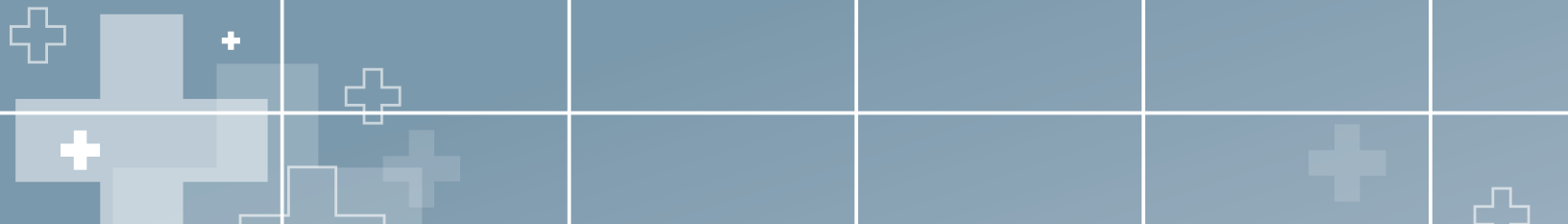
MCKEE FOUNDATION

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The Robert E. and Evelyn McKee Foundation in El Paso, Texas, has a history of philanthropy dating back to 1952. TTUHSC El Paso was honored to join the long list of benefactors when it first donated to the Texas Tech Physicians of El Paso Breast Care Center in 1995.



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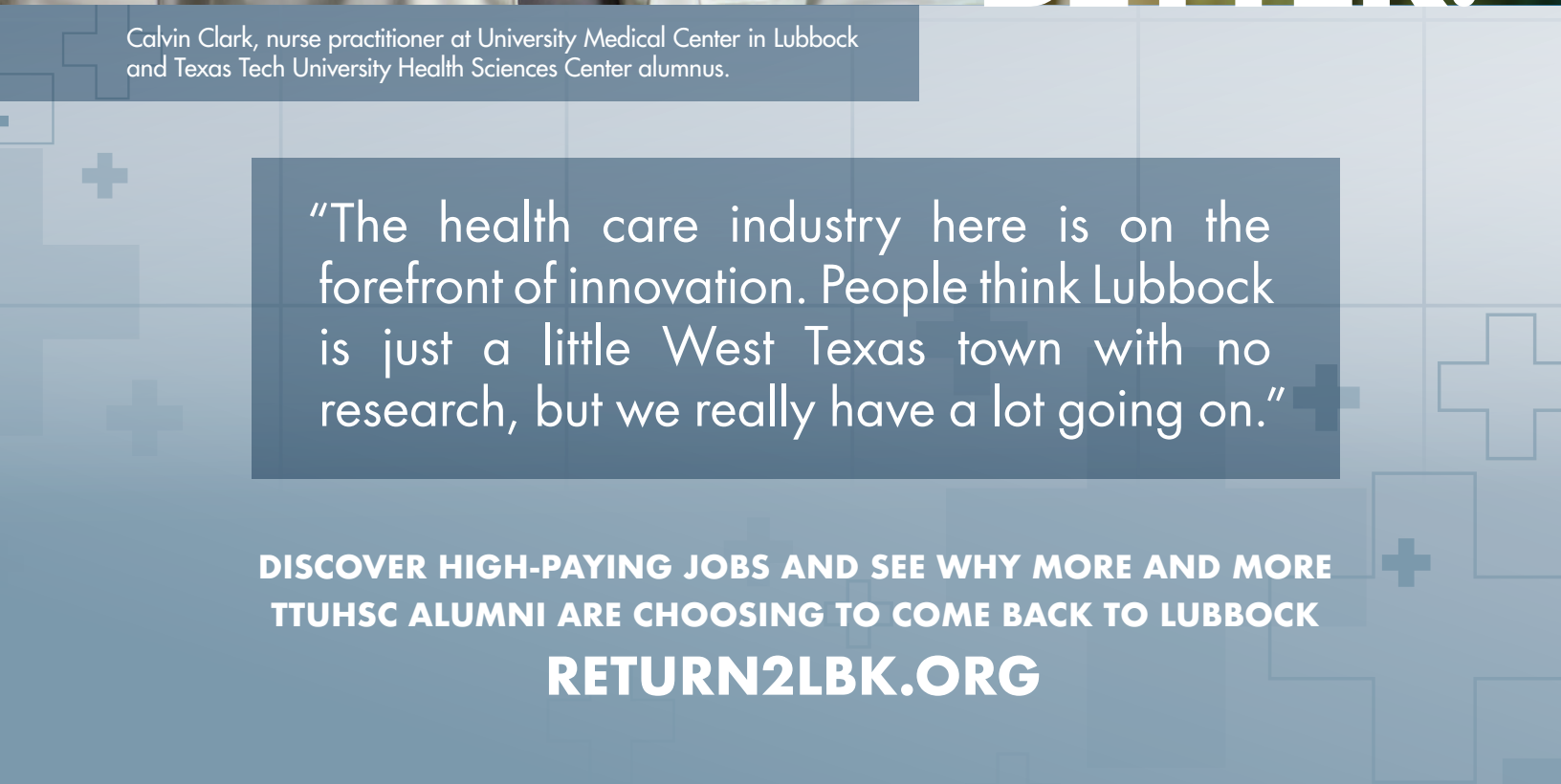
**COME
BACK.
MOVE
UP.
LIVE
BETTER.**

Calvin Clark, nurse practitioner at University Medical Center in Lubbock and Texas Tech University Health Sciences Center alumnus.

"The health care industry here is on the forefront of innovation. People think Lubbock is just a little West Texas town with no research, but we really have a lot going on."

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TTUHSC ALUMNI ARE CHOOSING TO COME BACK TO LUBBOCK**

[RETURN2LBK.ORG](https://return2lbk.org)





After their father's death, Byron Newby and Hi Newby expected their mother would, at some point, return to her "extremely capable, on-top-of-everything" self. Instead, she slowly slipped into someone she would never have wanted to become.

"We just missed the signs (of Alzheimer's)," said Byron. "We didn't want to see them, or we were in denial. Either way, Alzheimer's changed everything about her. We really had no idea what to expect and had no idea how to help her and, at the same time, we had to take over her life. There's a lot of guilt that goes along with that."

It was a feeling, Hi Newby said, they wouldn't wish on anyone, so they took action by investing in Alzheimer's research and caregiver support at TTUHSC.

READ THE NEWBY'S STORY

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