

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



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# ALUMNI PAGES 48-54



BAILEY WILSON ESCARZAGA, MD | PAUL L. FOSTER SCHOOL OF MEDICINE
 BAILEY WILSON ESCARZAGA, MD | PAUL L. FOSTER SCHOOL OF MEDICINE
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The Campaign for Your Life, Our Purpose www.yourlifeourpurpose.com



🏏 @TeddLMitchell 🖸 @TTUHSCPresident

## THE NEXT 50 YEARS

There has never been a more exciting time at TTUHSC. This fall we launched the firstever comprehensive campaign for our university that will set the stage for our success as we move forward.

Our goal for The Campaign for Your Life, Our Purpose is to raise \$150 million to establish endowments for funding student scholarships, research initiatives and ongoing exceptional patient care.

Over the past 50 years, we've already done great things in all three of these areas, and we are extremely thankful for those of you who have helped us get to this point. Moving forward, our goal is to create an endowment that will annually provide support to enhance each of these areas for years to come.

There are several factors that make this the optimum time for this campaign. First and foremost, TTUHSC is a proven leader not only in delivering health care for this region and beyond, but also in shaping the future of health care by advancing knowledge through research and sharing that knowledge with the next generation of health care providers.

We have grown from one medical school, training physicians to meet the health care needs in this vastly underserved area, to one of the largest health sciences centers in the state. We're addressing some of the most critical health care challenges including access, healthy aging, prevention and rehabilitative care.

As a result, TTUHSC is experiencing the first major expansion of facilities on all of our campuses. In the coming months, we will begin construction for new research laboratories, a simulation training facility and technology-enhanced classrooms. These projects give us the opportunity to leverage funding from the state through tuition revenue bonds toward legacy gifts for donors. (Read more about these projects and the campaign on pages 24-29).

In May 1969, the Texas Legislature approved the establishment of our School of Medicine and subsequently TTUHSC. Now, we are on the cusp of a milestone for our university — our 50th anniversary. By May 2019, we plan to have reached, or even exceeded, our campaign goal. This date is significant as it will be a time to celebrate the investment in our future and honor our past.

You've been an important part of our past and a significant reason for where we are today. There are exciting days ahead, and we would be honored to have you join us for the next 50 years of our impact on health care.

Tedd L. Mitchell, MD TTUHSC President

Texas Tech University System Chancellor ROBERT L. DUNCAN

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## DENTAL MEDICINE FOR WEST TEXAS

I am very excited to announce that TTUHSC El Paso will soon add a school of dental medicine, with plans to enroll its inaugural class in 2020. TTUHSC El Paso owes this exciting opportunity, in part, to a generous \$25 million gift from the Woody and Gayle Hunt Family Foundation and a \$6 million grant from the Paso Del Norte Health Foundation.

Like the Paul L. Foster School of Medicine, the Gayle Greve Hunt School of Nursing and the Graduate School of Biomedical Sciences, the Woody L. Hunt School of Dental Medicine (WLHSODM) will have a significant impact on the Paso del Norte region and West Texas.

The WLHSODM will mark a number of firsts for our region. It will be the first dental school on the U.S.-Mexico border and the first dental school to open in the state in nearly 50 years.

A 2014 study by the Texas Department of State Health Services found that the Upper Rio Grande region, which includes El Paso, has only 20 dentists for every 100,000 people. The state average is nearly double that, with 36 dentists for every 100,000. Adding to that strain, more than one-third — 37 percent — of dentists in Texas are at or approaching retirement age. In El Paso, almost 60 percent of our dentists are 55 years of age or older.

Due to the lack of dental schools in the border region, few Paso del Norte natives pursue a career in dentistry. Between 2006 and 2015, just 2.5 percent of all Texas dental school graduates practiced in the Upper Rio Grande or West Texas regions, and less than 1 percent took up practice in El Paso — that's only 20 graduates.

The school also will provide a unique, community-centered curriculum. Unlike traditional, rote-based learning, its curriculum will focus on service education, a form of teaching that encourages meaningful community service.

This approach results in one-of-a-kind, hands-on experiences that allow students to apply their newfound knowledge and skills to life beyond the classroom, while simultaneously helping the community.

A low-cost dental health clinic also will be established in central El Paso. There, students will train with our dental school faculty and provide affordable dental services to one of the city's most underserved communities. Additional training opportunities will take place at local private practice dentists' offices, as well as clinic sites for organizations that provide affordable dental services to the poor and uninsured.

By 2023, the school is expected to admit its first class of dental hygienists. At full capacity, the WLHSODM will graduate 75 dentists and 60 dental hygienists per year.

Thanks to dedicated supporters, like you, TTUHSC El Paso is changing the landscape of health care.

Richard Lange, MD, MBA TTUHSC El Paso President

## PULSE EDITORIAL

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## TTUHSCEP 🖸 @PresidentLange

## **TTUHSC Opens Third Building on Abilene Campus**

TTUHSC and Abilene community leaders came together Sept. 15 to celebrate the opening of TTUHSC's newest building on its Abilene campus, which will be home to the future School of Public Health.

Made possible through private donations, the future school will occupy the third building on the Abilene campus adjacent to the School of Nursing and School of Pharmacy buildings. Graduates of the future School of Public Health will become qualified experts in managing data and providing important and timely healthrelated resources to communities in need. (Read more about TTUHSC's public health program in the Winter 2015 issue of PULSE at http://bit.ly/2hRcYB4.)

TTUHSC President Tedd L. Mitchell, MD, said the future school will act as a resource for the region, by acquiring and providing data vital to those in the public and private sectors who seek to better understand the factors that impact the health of citizens.



"Through educational and research programs, the future School of Public Health will address the growing needs of our region and state by providing professionals trained to study and preserve the health of communities," said Mitchell.

"We could not have done this without the support of the Abilene community and the hard work of its leaders," he added. "This future school adds an entirely new dimension to TTUHSC's mission to serve the great folks of West Texas and beyond."

## F. Marie Hall SimLife Center Chosen as Test Site for Holographic Technology

F. Marie Hall SimLife Center has been named one of two medical simulation centers nationwide to participate in a pilot study with San Diego State University using holographic technology created by Pearson.

The goal, said Sharon Decker, PhD, RN, associate dean for simulation, is to increase simulation learning while improving the quality of education and overall health care.

"This project is consistent with TTUHSC's aim to be a thought leader and innovator," Decker said. "This unprecedented collaboration between higher education and industry will solve real problems in medical education."

The mixed reality pilot will incorporate Microsoft HoloLens, the world's first untethered, head-mounted computer. The content will be created using Microsoft's holographic video capture capability to process video of people with various health concerns into holograms for students to experience in a clinical setting.

"Many health care programs would love to have standardized patients as part of their curriculum," said Peter Campbell, director of strategy for Pearson Immersive Learning Solutions. "Finding, hiring, training and maintaining a highly skilled and diverse set of standardized patients is incredibly expensive and complex. Our solution is to build a set of standardized patient holograms that will bring the value of standardized patients to health care programs at a fraction of the cost and with much less complexity to deliver."

Pearson is currently focusing on creating three patient simulations: 1) going through the stages of anaphylaxis progressing to respiratory failure; 2) an elderly person who needs to be evaluated for physical and cognitive pathologies; and 3) a patient experiencing a progressive decline in either their physical or cognitive state.

The company is looking to apply their hologram technology across disciplines by creating holographic models that will allow students to observe phenomena in chemistry, anatomy, physiology, history, mathematics, economics, art and design in three-dimensional detail.

## Pharmacy Alumna Takes on Mental Health, Addiction Issues

By Mark Hendricks

Growing up in Dallas, Yasmine Alhasan, PharmD, (Pharmacy '16) always wanted to make a difference through health care. She started achieving that goal at TTUHSC, where she became a student leader for the School of Pharmacy's Class of 2016 and the Texas Pharmacy Association (TPA).

"I became involved with TPA during my first year of pharmacy school," Alhasan said. "I had an interest in law and policy prior to pharmacy school, and TPA was the perfect place for me to expand upon my interests with other pharmacists. Involvement in the legislative process is incredibly important since it governs how we practice, and I wanted to work in that role."

Encouraged by her TPA mentors, Alhasan founded the Student Pharmacist Recovery Network (SPRN) during her final year of pharmacy school. Through SPRN, she began working within the School of Pharmacy and the community to dismantle the stigma that often surrounds mental health and addiction issues. Because she also saw a need to reach out to students who may be dealing with those issues on a personal level, she tied SPRN to the Professional Recovery Network, an organization that aids health care professionals in Texas.

"As pharmacists, we must lead by example to change how our nation views mental health and its related topics of addiction and suicide," Alhasan said. "I also think it is incredibly important to provide confidential and reliable resources for our student body through peer outreach groups. As health care professionals, we focus our attention on the health of others while often times neglecting our own."

In July, Alhasan completed a two-year term as president of TPA's Student Board of Directors. She also was named the group's 2016 Distinguished Student Pharmacist, an award that recognizes a fourth-year pharmacy student in Texas who has demonstrated leadership and advanced the practice of pharmacy through their service to the community and TPA. Alhasan says the award is important to her because TPA changed the course of her career.



"The organization helped me find what I was passionate about and allowed me to expand on my interests," she said. "I think sometimes as health care professionals we focus so much on health and wellness that we tend to neglect areas of legislation and policy within the health care system that are equally important. TPA showed me that it was possible to do both and that my voice mattered even as a student pharmacist."

Alhasan presently works as a relief pharmacist at several Walgreens retail and specialty pharmacy locations in central Dallas. She enjoys the direct interaction she has with her patients, and she sees firsthand the value and impact community pharmacists have on public health.

"As a new practitioner, I am in the process of figuring out how I am able to make the biggest impact in relation to issues that I think are important," Alhasan said. "I am a pharmacist, but I am also a human first, and I think there are many opportunities for health care professionals to contribute that are not just strictly health care initiatives."

Matters of the Heart is a narrative in PULSE designed to highlight the passion for health, wellness and humanity shown through the work of our alumni, faculty, staff, students and friends. Story suggestions are welcomed.

## **TTUHSC Breaks Ground for New Academic Building at Odessa**

TTUHSC broke ground Nov. 15 for construction of a new 51,000-squarefoot Academic Building in Odessa.

In August, the facilities committee of the TTU System Board of Regents voted to approve construction of the new building. The project's \$22.3 million budget includes more than \$14.25 million in tuition revenue bonds authorized by the 84th Texas Legislature. In addition, more than \$5.54 million will come from institutional funds.

The Academic Building will house lecture halls, classrooms, research laboratories, offices, conference areas and additional support space. These facilities will allow the Permian Basin campus to increase the number of graduate students it accepts for medical and other health care disciplines.

The expansion will also help leverage funds for TTUHSC's campaign (See pages 24-29).



"Odessa and Midland have long recognized the importance of TTUHSC to the Permian Basin," said Dan Hollmann, a community champion for The Campaign for Your Life, Our Purpose and a shareholder and attorney with Atkins, Hollmann, Jones, Peacock, Lewis & Lyon Inc. in Odessa. "We have been working with the administration of TTUHSC for many years to obtain the funding for the new Academic Building. The communities have come together to help provide a state-of-the-art educational facility for the students of the Permian Basin. The growth of our Permian Basin campus shows TTUHSC is committed to providing the best education to students in Midland and Odessa."



## Elementary Students Role Play Physicians During Mini Camp

Kafayat Busari remembers the impression a museum event made on her at a young age and hopes spending the day as a doctor did the same for a group of elementary students from Post, Texas.

The Student National Medical Association (SNMA) hosted Doctors for a Day Mini Camp in late October. Busari, SNMA president and TTUHSC second-year medical student, said the organization wanted to create an interactive and fun way to expose students to the field of medicine.

Students got a hands-on experience at the F. Marie Hall SimLife Center diagnosing patients with different medical scenarios, working with ultrasound equipment to learn how physicians use it, and learning CPR to "Staying Alive."

"Our goal is to make this fun and interactive for the students and host this camp annually for students throughout West Texas," Busari said. "Many students may have never imagined they too can go into this profession. Our hope is that the students will walk away knowing they too can become a doctor."

## GRANDROUNDS



## **TTUHSC Hosts International Conference on Ultrasound**

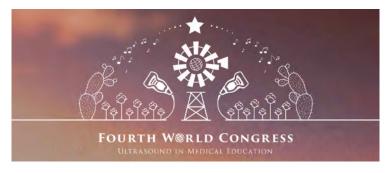
TTUHSC at Lubbock was host to top ultrasound practitioners and educators in September for the Fourth World Congress on Ultrasound in Medical Education.

The conference featured researchers, physicians and other experts in the field of ultrasound. Jongyeol Kim, MD, associate professor of neurology in the School of Medicine and World Congress organizer, said ultrasonography has been widely used in radiology, cardiology, and obstetrics and gynecology over the past several decades, and as ultrasound machines are becoming more compact and affordable, clinicians from other specialties are also starting to use the technology.

"The availability of portable ultrasound devices enables physicians of other specialties such as emergency medicine, critical care and internal medicine to embrace point-of-care ultrasonography," Kim said, "ultrasonography performed and interpreted by the clinician at the bedside."

In addition, medical schools, including TTUHSC's have begun teaching ultrasound as part of the regular curriculum, he said.

"During anatomy class, the first-year medical students are scanning standardized patients or models to see organs after cadaver dissection. Seeing organs and blood flow in the live human body with nonintrusive ultrasound augments the students' learning experience when they learn anatomy, physiology and physical examination skills," Kim said.



## **Awards & Accolades**



The American Cancer Society recognized **RAED ALALAWI**, **MD**, this summer during the Lubbock Cattle Baron's Ball as the recipient of the 2016 Silver Stirrup Medical Award. Alalawi was co-founder of the School of Medicine Pulmonary and Critical Care Medicine Fellowship and currently

serves as associate program director. He also established a comprehensive interventional pulmonary service, which was the first in West Texas, and has been involved in smoking cessation programs through the Department of Psychology in the TTU College of Arts and Sciences and the American Cancer Society.



#### NINH (IRENE) M. LA-BECK, PHARMD,

received the 2016 New Investigator Award from the American College of Clinical Pharmacy.

The award is presented in recognition of significant research contributions in clinical pharmaceutical science and of a research program that includes a

substantial publication record, a programmatic theme or an especially noteworthy single publication.

Many of La-Beck's peer-reviewed research papers, review articles, book chapters and abstracts have been published in leading research journals, including *Cancer Medicine; Clinical Pharmacology & Therapeutics; Journal of Pharmacology and Experimental Therapeutics; and Nanomedicine: Nanotechnology, Biology, and Medicine.* 

La-Beck is an assistant professor in the Department of Immunotherapeutics and Biotechnology at the School of Pharmacy at Abilene. Her current research focuses on understanding how interactions between anticancer drugs and the immune system alter the immune response against tumors.

With funding from a National Institutes of Health grant, and by utilizing a combination of studies in cells, animals and patients, her research team has uncovered new ways a class of nanoparticle anticancer drugs currently used in the clinic can affect and regulate cell immunity.

**THE BREAST CANCER CENTER OF EXCELLENCE** received a twoyear, \$300,000 grant from the Cancer Prevention Research Institute of Texas (CPRIT) to fund the creation of a program to teach breast cancer screenings to other medical organizations personnel. This was the third award to the center from CPRIT, but the first for this program.

## GRANDROUNDS



You can watch the full announcement by visiting TTUHSC's news page, Daily Dose, at http://bit.ly/2qd7Ti9.

## CMN Gift to Provide New Home for TTUHSC Pediatric Services

Children's Miracle Network is contributing \$6 million toward a stand-alone pediatric specialty facility that will be constructed on the grounds of TTUHSC's Amarillo campus. The gift was formally announced Nov. 18.

Jodi Reid, director of CMN-Amarillo for the Harrington Cancer and Health Foundation Children's Miracle Network, said the building will house all of TTUHSC's pediatric specialties including cardiology, nephrology, neurology, endocrinology, hem-oncology, special needs, gastrointerology and pulmonology. She said the facility will significantly aid TTUHSC's efforts to bring new pediatric specialties, and recruit specialized pediatric practitioners to its Amarillo campus.

"This project will provide a home for pediatric specialty physicians and will allow children to receive the care they need close to home," Reid said. "This gift will not only transform Amarillo and the TTUHSC campus, it will make an exceptional difference in the lives of pediatric patients in the Texas Panhandle area."

## School of Medicine Receives National Ranking for Family Medicine Residency

Congratulations to the School of Medicine for ranking 12th in the nation for medical schools specializing in family medicine. This latest ranking comes from the Society of Teachers of Family Medicine (STFM) and is based on the percentage of students choosing a career in family medicine over a three-year period.

The School of Medicine was the only allopathic medical school in Texas that was on the Medical Doctor Granting Medical School list. The American Academy of Family Physicians national ranking was from their October *Family Medicine Journal*.

The Texas Medical Association reported Texas has about 43,000 physicians for a population of about 23 million. Texas has only 62 primary care physicians per 100,000 population, ranking 46th in the nation.

Providing primary care physicians for Texas has been a priority for the School of Medicine. In 2010, the school began the Family Medicine Accelerated Track (FMAT) program, which allows primary care students at the School of Medicine to complete their degree in three years at half of the cost of the standard four-year medical degree program that would provide more primary care physicians received national coverage. The FMAT was the first three-year medical degree approved by the nationally recognized accrediting authority for medical education. Eleven other medical schools have developed or are developing similar programs.

## S minutes with the faculty...

## COMMUNITY ENGAGEMENT

JULIE ST. JOHN, DRPH, MPH, MA | Helping bring TTUHSC's public health program online | By Holly Leger

As an assistant professor, public health consultant, pastor's wife and mother to eight boys (with a ninth baby due in March), Julie St. John, DrPh, MPH, MA, rarely has a moment when she's not teaching. Luckily, it is a job she loves.

"I enjoy the opportunity to learn from each other, and the hands-on component and encouraging creativity," said St. John, assistant professor in the Graduate School of Biomedical Sciences Department of Public Health.

St. John has spent over 15 years educating others in the field of public health. Previously, she taught community health workers at Texas A&M University and developed over 400 hours of curriculum for the school.

When TTUHSC founded an MPH program, St. John was hired in 2014 to start the program



in Abilene. Now she is preparing to launch the online MPH program in fall 2017. Currently, the only other school in Texas to offer an online MPH is the University of North Texas, but students must be a CEO or CFO to enroll. TTUHSC will be one of the first in the state to offer an open generalist MPH online degree.

"This is pretty significant," said St. John, who will serve as director of the online MPH program. "We feel like we will help reach a void."

Though she is extremely passionate about public health, St. John admits it wasn't her first choice as a career. Originally, she got her master's in cross cultural communications from Southwestern Baptist Theology Seminary, with plans to later attend medical school. But each time she traveled overseas as part of her education and training in communications, her heart was pulled towards public health needs at the population level.

She decided to get a second master's in public health. When she was accepted into medical school a few years later, she turned it down, pursuing her doctorate in public health instead, a choice she is still proud of today.

"The grass root changes at population levels and working in the community was what interested me," St. John said. "I like the opportunity to see communities take responsibility and make changes."

## Did you know ...

- Julie St. John is bilingual in English and Spanish. She also took classes in American Sign Language, because her childhood best friend was deaf.
- Her eight boys range in age from 3–20 years old. Will her ninth be a girl? She is waiting to be surprised!
- She enjoys cooking and baking, especially fudge, cinnamon rolls and Christmas candy.
- Her best advice to students: Pursue something you enjoy doing. Think of the issues you can't stop talking about and explore those fields.
- Through her education and training, she has traveled to China, Turkey, Russia, Germany, England, Romania, Slovenia, Mexico, the Dominican Republic, Jamaica, Venezuela and Belize.



Joshua Jackson is a five-time national champion. He earned titles in California, Florida, Indiana and Nevada. In 2015, Jackson claimed the New Mexico Motor Racing Association Rookie of the Year award.



Joshua Jackson was wheelchair-bound for four months after the 2015 accident. His grandfather, Bobby Jackson, traveled with him from Colorado to Nebraska to support the teenage race car driver.

## Teen Race Car Driver Makes Miracle Recovery, Thanks Care Team a Year Later

On the one-year anniversary of a life-changing crash, teen race car driver Joshua Jackson returned to El Paso to thank the professionals on his care team — many of whom were TTUHSC El Paso faculty and residents.

In 2015, then 17-year-old Jackson was competing at a racetrack at the Southern New Mexico Speedway in Las Cruces, New Mexico. After being hit by another car, the protective roll cage of Jackson's car was torn through by a third car, cracking the NASCAR hopeful's helmet and skull. Jackson, an Albuquerque, New Mexico, resident, had driven the course nearly 40 times and had been in plenty of wrecks, but this one was different. The unconscious teen was airlifted to University Medical Center of El Paso.

"When Joshua arrived at the emergency room, he had exposed brain and a massive scalp laceration. He was in bad shape," said Paul Livingston, MD, a TTUHSC El Paso emergency medicine resident. "The best decision made that night was the decision by the helicopter team to bring him here."

Though Jackson lost his left eye and now wears a prosthetic, the teenager is resuming his senior year pain-free and off medications. For his mother, Ginger Jackson, the support of the racing community and hospital was unexpected.

"We had people helping with food, clothes, living arrangements, donations and fundraisers," she said. The Jackson family temporarily took up residence in El Paso, nearly 300 miles away from their New Mexico home, and received support from as far away as Hawaii and Australia. "All kinds of things happened that a lot of it I didn't know until after."

Despite continuing rehabilitation — regaining movement to his right side and relearning to walk one year after the crash — the champion teen driver with multiple Rookie of the Year awards has plans to return to the racetrack.

Because the Jackson family had prepared for the worst, Joshua's mother is still left speechless when acknowledging all who were involved in this success story.

"The word thanks isn't enough, but it's all we have," she said.

Watch a video of Joshua Jackson thanking his care team at elpaso.ttuhsc.edu/ia/patient-returns.aspx

<image>

2016-17 TTUHSC El Paso Student Government Association Cabinet: Chris Gerzina, Paul L. Foster School of Medicine; Kharisma James, Gayle Greve Hunt School of Nursing; Alexandria Rivas and Eric Vest, Graduate School of Biomedical Sciences.

## EL PASO 🤇 GRANDROUNDS





## TTUHSC EI Paso Hosts Texas Tech Foundation Board for

**the First Time** The Texas Tech Foundation Board of Directors held its first-ever meeting in El Paso June 9-10. The board, which represents the four universities in the TTU System, meets quarterly to provide volunteer leadership to facilitate institutional advancement.

"El Paso is such a dynamic part of the system and the growth has been tremendous, so we brought the foundation board here to celebrate that great growth, as well as Dr. Lange's [president of TTUHSC El Paso] vision," said Vice Chancellor for Institutional Advancement Lisa Calvert.

The board's visit kicked off with a tour of TTUHSC El Paso, followed by dinner at the home of TTU System Regent Rick Francis and his wife, Ginger Francis. Board members also attended the Lawrence Tyler Francis Grand Lobby dedication at the Gayle Greve Hunt School of Nursing. The lobby is named in honor of the Francis' son, Tyler Francis, who passed away in 2014.



The visit culminated with board members joining students, staff and faculty, as well as members of the El Paso community, for TTUHSC El Paso's second annual Texas Tech Night at the Chihuahuas'. TTU System Chancellor Robert Duncan threw the first pitch of the night.

## **New SGA Cabinet Leads El Paso Campus**

The TTUHSC El Paso Student Government Association (SGA) has shifted gears.

Starting May 2016, the organization began representing all students at TTUHSC El Paso – not just those in the Paul L. Foster School of Medicine (PLFSOM). The university has experienced rapid growth in the past year, including the addition of a new Master of Science in Biomedical Sciences and a forthcoming degree in dental medicine. This transformation prompted the SGA to expand its representation.

The first SGA cabinet to take on this new role is rightfully composed of a diverse group of students from each of TTUHSC El Paso's three schools: the PLFSOM, the Graduate School of Biomedical Sciences (GSBS) and the Gayle Greve Hunt School of Nursing. Eric Vest, a master's student in the GSBS, leads the SGA as president; fellow GSBS master's student Alexandria Rivas serves as vice president of communications; Chris Gerzina, a medical student, serves as vice president of operations; and Kharisma James, a nursing student, serves as vice president of finance.

The cabinet's focus is on building the campus' involvement in the El Paso community and bringing attention to El Paso's role in the greater TTU System.



## Underserved West Texas Communities Receive Free Health Education BY NADIA M. WHITEHEAD

TTUHSC El Paso is the only institution in the state to receive one of the U.S. Department of Agriculture's 45 distance learning grants. The \$430,780 grant was awarded to the Gayle Greve Hunt School of Nursing (GGHSON) to provide distance health education to 10 underserved communities in rural West Texas.

"I grew up in a small town, and I understand what rurality is," said Associate Professor and Assistant Dean Penny Cooper, DNP, RN, who leads the project. "Rurality impacts poverty and knowledge base, and ultimately health."

Cooper's first step will be to determine the unique health education needs of each



community. "Whether they need education on street safety, oral health, nutrition, obesity, exercise, chronic disease — we'll be there to collaborate with them."

In partnership with University Medical Center of El Paso, the GGHSON will also provide live-streamed Continuing Nursing Education courses to nurses in rural hospitals and medical centers, a requirement that can be challenging for nurses working in isolated settings.

Another program goal is to inspire rural students to pursue careers in health care. As Cooper explained, "The job potentials for many of these communities are [traditionally] limited to prison guards, farmers and border patrol agents."

The GGHSON project has been endorsed by U.S. Reps. Will Hurd and Beto O'Rourke and Texas Sen. José Rodríguez, as well as community agencies such as the Texas E-Health Alliance and the Workforce Solutions Borderplex.

The program officially launched in fall 2016 with the installation of video conferencing technology at the 10 community sites.



## TTUHSC EI Paso Infuses \$227 Million into El Paso Economy By Nadia M. WHITEHEAD

TTUHSC El Paso contributed a total of \$227 million to the El Paso economy in 2015, according to a new report by the Hunt Institute for Global Competitiveness.

"This is an exciting time to be a part of TTUHSC El Paso," said President Richard Lange, MD, MBA. "Our commitment to the border region profoundly impacts the quality of life for residents in our region, and I am proud of the university's contributions to the economy." In this same year, the university also provided \$29 million in uncompensated care to address the health needs of El Paso. The Hunt Institute estimates that's the equivalent of providing \$734 worth of medical care to each El Paso County family living below the poverty line.

Lange hopes the university's impact continues to grow for years to come. "For almost 40 years, we have played a pivotal role in advancing education, research and patient care in the Paso del Norte region, and I look forward to enhancing and expanding services to our community."

## EL PASO 🤇 GRANDROUNDS

## SOMETHING TO *Smile* About

## \$25 Million Gift Establishes First Dental School in TTU System

By Nadia M. Whitehead

A dental school is coming to the TTU System, and it's expected to change the face of health care in West Texas.

For years, the western half of the state has suffered from a severe shortage of dentists. El Paso County has just 172 dentists to serve its population of nearly 860,000 residents. Other western counties fare worse. Presidio, Hudspeth and Culberson do not have a single dentist to serve their residents, and Jeff Davis County has only one.

But now, thanks to a \$25 million gift, TTUHSC El Paso will reverse this shortfall. By strategically planting a new dental school in the midst of this severely underserved area, the university expects to attract more dentists and dental students to the region.

"By establishing a school here in the heart of the Borderplex, we expect to retain dentists in our area to help fill this gap," said TTUHSC El Paso President Richard Lange, MD, MBA.

There has not been a new dental school in Texas in nearly 50 years; the last one opened in 1970. Of the three dental schools currently in the state, all are located more than 500 miles away from El Paso — in San Antonio, Houston and Dallas. Together, the three schools graduate some 300 students a year, yet few of their graduates opt to practice in the West Texas region. Between 2006 and 2015, just 2.5 percent of all Texas dental school graduates chose to establish practices in West Texas. That statistic is even bleaker for El Paso, with less than 1 percent taking up practice in the border city.

But when philanthropists Woody and Gayle Hunt got wind of the problem, they were moved to help fix it.

Just six months after learning about the shortage, the Woody and Gayle Hunt Family Foundation issued a momentous announcement. The organization would gift \$25 million — the largest in the foundation's history — to TTUHSC El Paso for the Woody L. Hunt School of Dental Medicine (WLHSODM).



Through its generous gift, the Woody and Gayle Hunt Family Foundation is helping to bring a dental school to El Paso. Pictured, Gayle and Woody Hunt.

"The generosity of the Hunt family will impact the landscape of our city and the people who live here," said TTUHSC El Paso Associate Vice Chancellor for Institutional Advancement Victoria Pineda. "This landmark gift is a testament to the tremendous impact that a few can make by touching the lives of many."

"We are confident that this dental school will have a significant impact on the Borderplex, the city of El Paso and the surrounding region," Woody Hunt said. "Our immediate goal is to attract bright medical talent and young men and women who are eager to stay in the area to practice dentistry."

But the generous pledge won't just bring dentists; it's expected to improve the overall health of the citizens of West Texas as well.

Poor oral health is linked to devastating conditions, including stroke, diabetes and cancer; yet less than half of El Paso's adults visit the dentist at least once a year. Contrastingly, some 60 percent of the U.S. adult population pays a visit to the dentist every year, according to the National Institute of Dental and Craniofacial Research.

TTU System Chancellor Robert Duncan believes that it's an exciting time for TTUHSC El Paso.

"This extraordinary gift strengthens our founding mission to serve the needs of our communities, region and state and adds to Woody and Gayle Hunt's astounding legacy of philanthropy at Texas Tech University Health Sciences Center El Paso," Duncan said.

Lange couldn't agree more. This momentous gift ensures that "the future of dental health care for the region is as brilliant as a set of newly polished teeth." The dental school is expected to welcome its first class of students in 2020.



For more information about the WLHSODM, visit: elpaso.ttuhsc.edu/sodm

## GRANDROUNDS

the facts

\$9,100



raised by **TTUHSC EI Paso** medical students at the Hearts for Sparks Golf Classic and Sprint for Sparks 5K supports a free health clinic in the underserved Sparks community. Proceeds will help provide basic medical supplies and equipment.





## \$79.4M

in financial aid awarded to **TTUHSC** students for the 2015-2016 academic year — 89% of which was loans.\*

## \$39,583.80

raised by **TTUHSC EI Paso** employees during the 2016 State Employee Charitable Campaign (SECC). The funds will go to a variety of charitable organizations, such as the Brain Tumor Association and Hispanic Scholarship Fund.

## \$969.3M

annual amount **TTUHSC** generates or sustains in our local economies.\*



granted to **TTUHSC EI Paso** by the National Institute of Diabetes and Digestive and Kidney Diseases for its role in a national consortium studying the digestive disease gastroparesis. The grant will support basic research and clinical trials for gastroparesis treatment options. Other consortium members include Baylor College of Medicine, Johns Hopkins University, Massachusetts General



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560K patient encounters facilitated through TTUHSC clinics and affiliated hospitals.\* RESEARCH & SCHOLARLY ACTIVITY

## ARLY ACTIVITY DISCOVERIES

## ON YOUR BEST BEHAVIOR HEALTH PROFESSIONS RESEARCHER EARNS INITIAL NIH FUNDING TO HELP CHILDREN WITH DEVELOPMENTAL DELAYS GAIN MISSING SOCIAL SKILLS



# INTERVENTION

Seed grant from School of Health Professions leads to NIH funding for new research model that has the potential for behavior modifications in children with developmental delays

For many, the feel of warm beach sand and rippling water creates an irresistible combination. It soothes and provides hours of sand castle fun.

As a toddler, Joe\* couldn't bear the touch of sand or water. The squishiness of his dad's shaving cream or the feel of cool blades of grass beneath his feet weren't tolerated either. Joe began his life as a super-preemie, weighing about a pound. He was "tiny and behind developmentally," his mother, Samantha,\* said. And he had neurological issues associated with touch, communication and sensory play.

Joe, and several children like him in a preschool program for children with language disorders at the University of Texas-Dallas, provided the clinical rationale for Mary Beth Schmitt, PhD, CCC-SLP, (Health Professions '98, '96) to develop a research study to determine the feasibility of a behavior regulation intervention for children with language and behavior impairment. She recently received an R03 grant from the National Institutes of Health (NIH), based on her initial work supported by seed money from the School of Health Professions. This grant is the first to support a study looking at behavioral intervention for such developmental issues, Schmitt said.

## BY **JO GRANT LANGSTON** PHOTOS BY **Neal Hinkle**

"Because of this study, we could see trained professionals in our schools, identifying these children and working with their teachers and families to resolve the issues. It is exciting to create a new model to help children earlier and hopefully avoid some behavioral problems that may develop."

> Lori Rice-Spearman, PhD, MT, (ASCP), (Health Professions '91, '86) Dean, School of Health Professions

"Many times, children with language impairment can communicate, but lack grammar skills and their vocabulary may be weak," said Schmitt, assistant professor of Speech and Hearing Sciences at her alma mater. "They may not remember instructions and have a hard time expressing what they like or dislike."

Most children develop the social skills to interact with their peers, family and the public. Some do not and lack understanding of how and when to communicate properly, Schmitt said.

"From my early work, I saw how some children couldn't grasp the concept of asking and answering questions," she said. "Back-and-forth conversations, such as they would have at a birthday party, were really hard. Lining up, cleaning up, sitting at story time or following classroom routines weren't possible."

For Joe, sensory stimulation presented problems, in addition to his communication issues. His mother observed his lack of assertiveness in dealing with playmates that took his toys away. He couldn't follow instructions and couldn't ask appropriate questions.

"We were despondent and discouraged until Dr. Schmitt's team began working with Joe. He worked really hard for two years and by the time he was 5, we were able to enroll him in school. Now, he is a perfectly normal teenager."

With the NIH funding, Schmitt will study how to train children like Joe in age-specific skills, especially those pertaining to classroom communication. She feels one of the best ways to help children is through play. Her team will use children's games, such as Slap Jack (a card game) and Simon Says to teach these missing skills. "Our goal is to work on their memory, learning how to pay attention and their inhibition," she said.

The ramifications of this study could include the development of a new model to intervene in these types of cases, said Lori Rice-Spearman, PhD, MT, ASCP, (Health Professions '91, '86) dean of the School of Health Professions. "This early work is developing an intervention model at an earlier age, which could create a positive impact for these children," she said. "Because of this study, we could see trained professionals in our schools, identifying these children and working with their "Many times, children with language impairment can communicate, but lack grammar skills and their vocabulary may be weak. They may not remember instructions and have a hard time expressing what they like or dislike."

Mary Beth Schmitt, PhD, CCC-SLP (Health Professions '98, '96) Assistant Professor, Speech and Hearing Sciences School of Health Professions

teachers and families to resolve the issues. It is exciting to create a new model to help children earlier and hopefully avoid some behavioral problems that may develop."

Rice-Spearman also feels this grant has the potential to create national recognition for the department and TTUHSC, creating opportunities for additional grants in the future. This would, in turn, create more avenues to help more children.

Rajinder Koul, PhD, TTUHSC assistant vice president for research, says Schmitt's work and the grant will "lead the charge" in developing these types of interventions for children. "We instill in our researchers the idea of 'thinking big' and creating innovative therapies. Dr. Schmitt saw a practical need and began working on a way to meet that need. Her study was an excellent avenue to receive our departmental seed money."

Rice-Spearman and Koul acknowledge the importance of having a researcher with Schmitt's credentials leading this groundbreaking effort.

"Through Dr. Schmitt's work in the TTUHSC School of Health Professions, the University of Texas-Dallas and The Ohio State University, she has proven herself to be an excellent researcher," Rice-Spearman said. "She has proven time and again her outstanding potential for research. Her dedication to helping these children is outstanding."

Koul echoes these thoughts from his experiences with Schmitt during her post-graduate work at TTUHSC. "She is blazing a trail. Her commitment to using research to find ways to help her clients is steadfast. She is an integral part of the School of Health Professions focus to become nationally recognized."

Samantha, Joe's mother, perhaps says it best. She remembers working through the maze of doctor's appointments, screenings, therapies and diagnoses before a referral to Schmitt's program in Dallas.

"I left doctors visits in tears. We knew he wasn't developing at an appropriate level, and we knew he wasn't classified as a special needs child. But the gap was widening between what he could do and what he should be able to do. At our appointment with Mary Beth, she looked at me and said, 'We can fix this.' And we did. It was truly a miracle," she said. GAME

## DISCOVERIES INVESTIGATIONS

## QUALITY CONTROL AT THE CELLULAR LEVEL COULD BE KEY TO FIGHTING DISEASE

Quality control is the process used to ensure products or services meet an identified standard for which they are created or offered, producing expected results every time. The cell has its own quality control process that, when working optimally, results in healthy cell function; conversely, a deviation can result in disease.

Protein synthesis is at the root of the cell functioning normally. Andrey L. Karamyshev, PhD, and his research team identified the novel pathway preventing synthesis of proteins and thus normal cell function. Based on this previous discovery, he is now leading research to identify key elements that interfere with protein synthesis specifically related to the decline in function of messenger RNA (mRNA), the cell's blueprint for optimum protein synthesis.

Identifying key elements that interrupt mRNA function could lead to new pharmacological targets for treatment of multiple diseases.

-DANETTE BAKER



Andrey L. Karamyshev, PhD, is an assistant professor in the School of Medicine Department of Cell Biology and Biochemistry. He joined TTUHSC in April 2016.



TTUHSC researchers involved in this investigation are Susan Bergeson, PhD, associate professor; Joseé Guindon, PhD, assistant professor, and Peter Syapin, PhD, professor, all in the School of Medicine Department of Pharmacology and Neuroscience.



Bergeson



Guindon



Syapin

## ANTIBIOTICS MAY PROVE NEW THERAPY FOR EFFECTS OF ALCOHOL OVER CONSUMPTION

A number of Americans who drink also struggle with what physicians now describe as Alcohol Use Disorder (AUD). AUD includes problematic drinking such as binge and chronic consumption, with both increasing risk for poor health, including death.

To date, there are not particularly effective therapies for AUD, with only three FDA approved drugs along with behavioral modification programs such as Alcoholics Anonymous. Together or alone, none are especially effective and relapse is common, making the development of new therapies vital.

A common antibiotic, however, is proving a potential new therapy for AUD. Collaborative efforts between TTUHSC researchers and clinicians at Oregon Health and Science University have identified that tigecycline, already approved by the FDA for use in humans for Methicillin-resistant Staphylococcus aureus, or MRSA infections, may be a good lead drug for the effective reduction of alcohol drinking, withdrawal symptoms and pain.

> In animal models, tigecycline was highly effective in reducing binge and chronic consumption, in both dependent and non-dependent animals. It also reduced withdrawal seizures, which represent a medical emergency in humans. And, persistent change in pain perception, caused by binge drinking, was reduced by tigecycline in males, but not females.

> > -TTUHSC COMMUNICATIONS AND MARKETING

TTUHSC El Paso medical students launch smart helmet startup to curb high school, peewee football concussions

By Nadia M. Whitehead Photos by Raul De La Cruz

Second-year medical students Justin Thomas, Sovanarak Lek, Tyler Trevino and Derrick Oaxaca are launching their own start-up company named Minus Tau after winning the Space Race, an international competition that challenged student teams to launch startups around near-term, commercially viable NASA inventions.

## THIS YEAR, AN ESTIMATED 1.6 MILLION ATHLETES WILL SUSTAIN A CONCUSSION, MANY OF WHICH WILL GO UNDIAGNOSED.

"Concussions that go undiagnosed are a huge health problem, especially for football players," said second-year medical student Derrick Oaxaca. "It is very common for athletes to remain in the game after experiencing concussion-like symptoms, receiving more impacts to the head, and that is when the brain becomes significantly damaged."

Athletes who resume playing in a sporting event before fully healing after a concussion can experience permanent brain damage, and even death. This happens all too often; nearly one-third of athletes have sustained a concussion that went undiagnosed and risked further brain injury, according to the *Clinical Journal of Sport Medicine*.

For a group of second-year medical students at the Paul L. Foster School of Medicine, those statistics were unacceptable. "We thought, 'How can we solve this problem? How can we get players and coaches to take these injuries seriously?" Oaxaca said.

The medical students' answer: a smart helmet capable of detecting an impact and notifying medical staff after the hit has occurred. This way, players can be taken off the field immediately, instead of continuing to participate while injured.

"Parents will be alerted, too," Oaxaca explained. "Imagine a mom or dad receiving a smartphone notification that their child just received a blow to the head. They're going to be concerned about safety and ensure their child receives proper medical attention."

Thanks to this innovative idea, the entrepreneurs were recently named winners of the Space Race, a rigorous international start-up competition hosted by NASA and the Center for Advancing Innovation. Part of the challenge was to reconfigure a patented NASA technology that's used in space for every day use on Earth.

The medical students, who have backgrounds in physics, psychology and even engineering, selected NASA's "self-aware," or intelligent wiring system, for the project. The wires instantly detect damage or defects and pinpoint the location of the problem.

"In space, the technology can tell astronauts exactly where a rock or meteor impact occurred on a spacecraft so that they can address the problem right away," Oaxaca said.

## THEY'RE NOT JUST APPLYING NASA TECHNOLOGY TO SOMETHING NEW; THEY'VE INVENTED THEIR OWN TECHNOLOGY. THAT'S A DIFFICULT THING TO DO.

Those capabilities were translated to helmet impact sensors for the Space Race. But the group is also patenting its own unique technology that it has developed along the way.

"What these students have done so far is incredible," said Gary Williams, PhD, an expert on startup companies and the team's advisor. "They're not just applying NASA technology to something new; they've invented their own technology. That's a difficult thing to do."

Williams serves on the board of directors for the Hub of Human Innovation, a local technology incubator that nurtures the development of small businesses. The Hub supported the students throughout their participation in the Space Race, as has Joel Quintana, a PhD electrical engineering candidate at The University of Texas at El Paso (UTEP). Quintana is advising the students as they develop new algorithms and theorems for the prototype.

The group admits there are smart helmet competitors out there, but believe their innovation has an edge. Besides its integration with cutting-edge NASA technology, the helmet will have additional capabilities.

"Our product is a step ahead of the game," Oaxaca said. Right now, diagnosing a concussion is not foolproof. "An impact that gives me a concussion may not give someone else a concussion."

Scientists don't know the exact force that will unequivocally result in a concussion. But recent research shows that a combination of data from the blow can help doctors make a more accurate diagnosis. These impact mechanics — rotational acceleration, linear force or acceleration, duration of impact and location of impact are all recorded by the helmet's sensors to provide a full medical assessment.

The team's marketing approach is also unique. Instead of selling an expensive smart helmet, the plan is to sell the sensors individually as accessories. That means customers won't need to purchase a brand-new helmet if they already own one.

The goal is for the product to be sold in athletic stores or directly to athletic programs, such as high school sports teams, under the name Minus Tau.



Tau is a protein that forms in the brain when someone experiences a concussion, or any form of brain damage. Today, many retired NFL football players who experienced repetitive head injuries during their careers suffer from chronic traumatic encephalopathy, a degenerative brain condition tied to dementia, suicide and depression. Studies have shown high levels of tau in these players' brains, prompting scientists to suspect that tau build-up is linked to increased risk of developing a brain disorder.

The team named the company Minus Tau in an effort to raise awareness about the condition, and with hope to eventually minimize these cases. Oaxaca said, "We want to prevent tau build-up in the brains of our athletes; we want to subtract it from the whole equation."

As winners of the Space Race, the students will now license the NASA technology — without having to pay up-front licensing fees — and officially launch their spin-off company Minus Tau. They also received \$2,500 to support the start-up venture.

Also on the team are second-year TTUHSC El Paso medical students Tyler Trevino, Justin Thomas and Sovanarak Lek, and Toriell Simon, an undergraduate business student at UTEP.

"We are extremely excited and eager to get this helmet technology out into the market so that we can begin having an impact on the treatment of concussions," Oaxaca said. "I have been fortunate to be a leader of an outstanding team; this accomplishment could not have been done without them."



Learn more about the competition at elpaso.ttuhsc.edu/ia/space-race.aspx

## DISCOVERIES INVESTIGATIONS EL PASO

### **OUT OF HIDING: TARGETING HIV'S LAST REFUGE**

One of the biggest challenges to discovering a cure for the human immunodeficiency virus (HIV) is when the disease becomes dormant — hidden and inactive within the human body. Modern therapy can practically wipe out the virus, but stores of latent HIV soon become active and multiply all over again.

"We need to find a way to wipe out latent HIV in order to find a cure for this disease," said Haoquan Wu, PhD.

Wu recently received a two-year, \$420,000 grant from the National Institute of Allergy and Infectious Diseases to study how HIV perseveres in humans. Wu's hunch is that certain human genes play a role in the virus' persistence.

To find out, Wu is conducting a genome-wide knockout screening that attempts to identify which human genes enable HIV to become latent. Wu and his team will specifically knock out, or deactivate, each gene in the human genome to identify which enable HIV's dormancy.

"By deactivating one gene at a time, we hope to see — at some point — latent HIV reactivate," Wu explained. "That will potentially mean that if we suppress this gene in humans with HIV, latent HIV will be reactivated."

A drug that targets the specific gene, or group of genes, could then be developed to target the genes in humans, reactivating latent HIV reservoirs in the body. These could then be easily detected and eradicated.

The team is using CRISPR-Cas9, a technology that allows scientists to cut and deactivate genes, to conduct their work.



Haoquan Wu, PhD, is a biomedical scientist at TTUHSC El Paso.



-NADIA M. WHITEHEAD



Ricardo Salazar, MD, associate professor and geriatric psychiatrist at TTUHSC El Paso, studies Alzheimer's in the Hispanic population.



### STUDY FINDS ALZHEIMER'S MANIFESTS DIFFERENTLY IN HISPANICS

Certain symptoms associated with Alzheimer's disease, including agitation and depression, affect Hispanics more frequently and severely than other ethnicities, according to a geriatric psychiatrist at TTUHSC El Paso.

The findings, published in the *Journal of Neuropsychiatry and Clinical Neuroscience*, suggest that Alzheimer's disease manifests itself differently in Hispanic populations.

"Our study shows that the severity and proportion of neuropsychiatric symptoms is significantly higher in a Hispanic group compared to non-Hispanic whites," said lead researcher Ricardo Salazar, MD.

Salazar's team gathered data on more than 2,100 individuals in the Texas Alzheimer's Research and Care Consortium database. Patients profiled in the

database have been diagnosed with Alzheimer's disease or mild cognitive impairment (MCI), or are otherwise healthy subjects. The researchers specifically focused on the extent of each individual's neuropsychiatric symptoms, which include depression, elation, anxiety, delusions and apathy.

Data showed that during MCI — the intermediate state between healthy cognition and Alzheimer's disease — all ethnicities were affected equally by these neuropsychiatric symptoms. But once the condition had progressed to full-on Alzheimer's disease, the severity of neuropsychiatric symptoms in Hispanics increased significantly.

Salazar believes these divergent symptoms may reflect a different disease process in Hispanics. "When patients have psychotic symptoms, that signifies deterioration of different areas of the

brain," he explained. "I believe functional imaging studies of the brain may show differences in amyloid or plaque collection in the brains of Hispanics with Alzheimer's disease."

While more research is needed, he warns that neuropsychiatric symptoms associated with Alzheimer's are linked to higher rates of institutionalization and more rapid progression of the disease. -NADIA M. WHITEHEAD

## THE CAMPAIGN FOR YOUR LIFE our purpose

Your support of TTUHSC's firstever campaign is an investment with significant dividends – improving health care through advancements in education and scientific discoveries

By Danette Baker

Tori Rymer, BSN, RN, walked across the stage in December fulfilling her dream to become a nurse. She's eager to start the next chapter, a job at the Veterans Affairs hospital in San Diego, California, and heads west with the confidence to deliver health care with compassion and grace as well as a lower college debt because of the education and scholarship support she received at TTUHSC.

"Having the opportunity to be a recipient of such generosity reduced my financial burden, allowing me to focus more time and energy on my studies and pursue my goal to become the nurse that I always dreamed of being," Rymer said.

"Years from now, I will always remember the donors that enabled me to fulfill that dream, my purpose, allowing me to get an amazing education at an amazing university."

Rymer leaves TTUHSC with a total \$35,000 debt accrued as she earned a bachelor's in nursing. Her tuition for the degree cost about \$21,000 for the 18 months of nursing school, according to information provided the School of Nursing. That doesn't take into account the average two years of tuition for prerequisites and living expenses. Rymer, a first-generation college student, had to provide those for herself. Her parents were not able to help her financially, she said, which is why, next to earning her degree, Rymer considers the scholarships she received priceless.

Student financial support is a key to recruiting students like Rymer – quality students who will go into their respective work communities to earn a living but also make a difference in the overall health of the community, said TTUHSC President Tedd L. Mitchell, MD.

"Through the years, we have had an incredible amount of (scholarship) support but moving forward, recruiting the quality of students we want at TTUHSC will come with a price tag."

Raising the goal amount is important and key to TTUHSC's future endeavors, but seeing the number of individuals contributing acknowledges the number of people who value what TTUHSC brings to the table.

#### THE CAMPAIGN FOR YOUR LIFE, OUR PURPOSE

Establishing scholarship endowments is one of the three funding priorities for TTUHSC's first major campaign. By 2019, the 50th anniversary of the founding of the School of Medicine and subsequently TTUHSC, the university has plans to raise \$150 million through The Campaign for Your Life, Our Purpose.

The campaign's public phase launched in November after university fundraisers worked behind the scenes for two years, raising \$59 million, or 39 percent of the goal. The gifts to date have come from 4,446 donors.

Raising the goal amount is important and key to TTUHSC's future endeavors, but seeing the number of individuals contributing acknowledges the number of people who value what TTUHSC brings to the table, said Kendra Burris, associate vice chancellor for Institutional Advancement, whose team is leading the campaign.

Longtime friends of TTUHSC, the Wayne and Jo Ann Moore Charitable Foundation in Midland, are among the campaign's contributors. Past gifts from the foundation have supported endowed

scholarships for physician assistant students and third-and-fourth year medical students studying at the Permian Basin.

In December, the foundation's board chose to make a gift of \$25,000 to the campaign, to provide additional scholarship support for students at the Permian Basin.

"A good number of the health care providers we have in this region are because of TTUHSC," said James Moore, foundation vice president. "We hope that with our involvement the university can continue to attract quality students, faculty and researchers who become health care providers here, or if they do go elsewhere that they share about our programs out here and attract others to this area."

### **RIGHT TIME, RIGHT PLACE**

In addition to scholarship support, gifts from The Campaign for Your Life, Our Purpose will help establish endowments for new scientific discoveries and to provide on-going, research-driven health care.

About 18 months ago, the chancellor and presidents of TTU, TTUHSC and TTUHSC El Paso formed an initiative focused on research collaborations among the three universities designed to enhance federally sponsored research across the system. Many of these projects need financial support to do the initial studies for data to support a federal grant submission, Mitchell said. Currently, the system's initiative provides up to \$50,000 per award for projects that involve faculty from at least two of the three institutions. Mitchell said additional funding could enhance this program and translational research, which is moving scientific discoveries made in the lab into new treatments and therapies for clinicians to use in treating patients.

The recent \$6 million gift from the Children's Miracle Network in Amarillo to TTUHSC is just one example of how, with support, TTUHSC can enhance patient care, Mitchell said. With CMN's support, TTUHSC is expanding its pediatric specialty services (See story on page 8).

"This is precisely what puts us in a position as a university to plant the seeds for developing programs and practices that will ensure families no longer have to travel away from this area to get specialty care for their children," said Todd Bell, MD, regional chair for pediatrics and associate professor in the School of Medicine at Amarillo. "But more than that, it is what puts TTUHSC on the map as experts in health care — not just for our own communities but for every community going out 100 to 200 miles or further. It also allows us to partner with colleagues at other universities to touch families even beyond this region."

The campaign also provides an opportunity for the university to leverage state funding it recently received for facility expansion on all campuses. In the last half of 2016, TTU System Board of Regents approved almost \$118 million in expansion projects on TTUHSC campuses at Amarillo, Lubbock and the Permian Basin.

The \$9.75 million Panhandle Clinical Simulation Center in Amarillo will advance simulation learning for students on that campus as well as the region. The Amarillo Economic Development Corporation also contributed \$500,000 to the project.

In Lubbock, \$89.5 million will build a new, formal entrance to the campus and west and north expansions of the existing building for a new gross anatomy lab, classroom and research space as well as a freestanding conference center.

The Permian Basin will gain a \$22.3 million academic building that will provide additional classrooms, research laboratories, faculty, staff and research offices and specialized instructional space equipped with data communications to enhance distance-learning.

A third building on the Abilene campus, which will house the future School of Public Health, was completed in September (See story on page 4). With the exception of the Abilene building, provided



through gifts from the community, the construction costs for the new facilities are paid for by tuition revenue bonds, which is also a factor in the campaign's timing.

"This gives us an opportunity, with this state support, to be able to leverage some of the state dollars toward legacy gifts for campaign donors, Mitchell said.

He often uses the analogy of planting trees to emphasize the necessity of donor support for TTUHSC's future growth.

"It's often said the best time to plant a tree was 20 years ago. The second best time is now.

"We are extremely fortunate that many have, through the years, invested their time, talents and treasures in TTUHSC, and it's no doubt that what we have here today is because of you.

"The shade we enjoy today, however, won't last forever. We have to plant more trees, and there is no better time than today."

## YOU & TTUHSC

Momentum throughout TTUHSC has been building over the past two years. Not only has the development team made a concerted focus on fundraising, but the alumni relations office has also focused on establishing a formal alumni association to enhance networking opportunities for TTUHSC's more than 20,000 graduates. The association now has a nongoverning National Advisory Board, led by Greg Thompson, MBA, MT, ASCP, (Health Professions '02).

"This is something that's been worked on before, but this time is making strong gains," Thompson said. "There are a good number of us excited about this opportunity.

"TTUHSC is sending expertly trained health care providers out to change the world, that should be a source of pride for all of us — those who have already earned our degrees, those who are here now and those who will come."

> Increasing public awareness was the precursor to The Campaign for Your Life, Our Purpose. Two years ago, the university focused on increasing the public's knowledge and awareness of TTUHSC's impact in the overall health care arena with the launch of Your Life, Our Purpose.

"The Campaign for Your Life, Our Purpose complements the public awareness initiative and provides an opportunity for people to invest in TTUHSC, which has proven to be a leader in research, education and patient care," said Burris.

TTUHSC's track record has more than impressed Betsy Triplett-Hurt, a TTU graduate, longtime Permian Basin resident and TTUHSC donor.

"On an analytical basis, it's a good investment because it's hard to recruit health care providers to this area of Texas," she said. "Once they get here, they fall in love with the community and stay.

"That means access to health care not only in Odessa where we have Texas Tech Physicians but also for places all around here because TTUHSC is vested in rural health and is committed to finding a way to get health care providers to remote areas with advancements like telemedicine," said Triplett-Hurt, a community champion for The Campaign for Your Life, Our Purpose. "It also means our communities will continue to flourish."

TTUHSC makes a positive impact on the local economies in which it has campuses. Last year, it contributed from \$13 million in Dallas to \$666.2 million in Lubbock, according to the TTUHSC 2015 Economic Impact Report. The report also reveals TTUHSC provided more than 560,000 patient encounters through its health care experts in its clinics and affiliated hospitals.

Although TTUHSC campuses are primarily located in West Texas, the work done by its faculty and students has a far-reaching impact. For example, Afzal Siddiqui, PhD, Grover E. Murray Distinguished Professor and director of the Center for Tropical Medicine and Infectious Diseases in the School of Medicine, developed a vaccine to prevent schistosomiasis, a waterborne that illness, that affects more than 250 million people in 78 countries worldwide, according to the World Health Organization.

Additionally, the work of world-renowned researcher Thomas Hale, PhD, RPh, professor and associate dean of research, led to the creation of the InfantRisk Center. The center is dedicated to advancing knowledge and public services related to medication safety for pregnant women and breastfeeding mothers. Hale leads perinatal pharmacological research, trains post-doctoral fellows and is acting executive director of the center, which also offers consumer resources including a hotline and a mobile app.

TTUHSC launched the public phase of its first-ever comprehensive campaign this fall, with the goal of raising \$150 million by 2019. The Campaign for Your Life, Our Purpose will support endowment initiatives for research, education and scholarships, and ongoing patient care and community outreach. "For me, I have seen how the contributions to Texas Tech have made my degree more valuable as the university has advanced nationwide as an institution of higher learning, and I want that for our TTUHSC students as well."

- SCOTT DUESER

Having faculty who are actively conducting research, sharing their recent discoveries with students and then applying the knowledge in the clinic is the hallmark of a health sciences center, and why the timing is right for TTUHSC to seek support, Mitchell said.

"TTUHSC is growing in all facets — research, education and patient care."

Student enrollment has steadily increased, reaching 4,625 this fall, and academic partnerships have propelled TTUHSC forward significantly, Mitchell said. TTUHSC at Abilene, which exists because of gifts from community partners, is a great example, he said. All three schools — pharmacy, nursing and the future School of Public Health — have dedicated facilities and each received start-up funding for the first three years from Abilene foundations, community leaders and individuals.

"Abilene and (TTUHSC) have a very special relationship even for those who don't have a personal relationship with Texas Tech," said Scott Dueser, chairman, CEO and president of First Financial Bankshares. He said his association with the TTU System, first as a TTU student, then as a member of the TTU System Board of Regents and now by serving on the Texas Tech Foundation and Chancellor's Council has given him ample opportunities to understand the economic and financial environments of the university and see the importance of philanthropy in its future.

"The funding for TTUHSC to do what it needs to do will not come by way of the state or through tuition," said Dueser, who also is a community champion for The Campaign for Your Life, Our Purpose. "TTUHSC is a good investment. I say that because I can see the dividends of my contributions in what it's doing for our community. It's bringing students here to learn who are either from West Texas or fall in love with it once they are here and so they stay to provide health care. It's also providing an avenue for students from our other three universities here to advance their education without leaving the area.

"For me, I have seen how the contributions to Texas Tech have made my degree more valuable as the university has advanced nationwide as an institution of higher learning, and I want that for our TTUHSC students as well."

TTUHSC alumnus Greg Thompson echoes Dueser's thoughts.

"I know for a fact that I wouldn't be where I am today without TTUHSC," said Thompson, COO and regional vice president for Medicaid-Texas with Amerigroup, an insurance and managed health care provider. "As an alumnus, I feel dedicated to giving something back to pay it forward for future generations.

"TTUHSC has come a long way from being just a 'school out in West Texas.' We are the top-ranked [university] for training health care providers. That's a great source of pride for me because I was part of creating that ranking, and it's a big reason why if we all get behind her, there's no limit to what TTUHSC can be 50 years from now." By Holly Leger | Photo by Kami Hunt | Illustration by Amanda Sneed

Tal Health

s someone who grew up on a remote farm in Kansas, Susan Calloway, PhD, PMHNP, FNP, understands firsthand the challenges of receiving medical care in rural areas. Only as a last resort would her family visit the physician in Highland, which was the nearest town to their farm.

"We didn't have much money, so you had to make sure you were really sick if you needed to see a doctor," Calloway said.

Years later, she returned to Highland as a family nurse practitioner, where she served her hometown community and noticed another challenge of rural health care. She was astounded at the number of people she treated who struggled with mental health disorders.

Already with an interest in the field of mental health, Calloway's experiences fueled a new passion, and she returned to school for certification as a psychiatric mental health nurse practitioner. The certification enabled her to diagnose complex mental disorders and become the mental health specialist for the patients who already trusted and knew her, rather than refer them to another professional miles away. Her goal was to become a better resource for small towns like Highland.

"When I returned to school to add on the psychiatric nurse practitioner specialty, I realized what a significant gap I had in my education," Calloway said. "Although many cases of depression and anxiety are straightforward and easily managed in primary care settings, many mental illnesses have similar symptoms making accurate diagnoses challenging. The psychiatric nurse practitioner specialty education provides the foundation for in-depth psychiatric evaluations and treatment." 615

Taking her passion one step further, Calloway, an associate professor and the 2016 Texas Nurse Practitioner of the Year, is now directing the School of Nursing's new psychiatric mental health nurse practitioner program, launching this month (January 2017). The track will provide graduates with evidence-based tools to diagnose and manage patients throughout the lifespan with common to complex mental health conditions.

Emily Merrill, PhD, FNP, RN, said the school is excited to extend this opportunity to nurses.

"This has been our vision and our hope that we would be able to develop this program to serve the needs of our community and our state," said Merrill, associate dean and Advance Practice Registered Nurse department chair. "It's going to affect our nation, because there is such a need for psychiatric mental health care."

According to the Centers for Disease Control and Prevention, about 25 percent of all U.S. adults have a mental illness and nearly 50 percent of U.S. adults will develop at least one mental illness during their lifetime. However, the nation's educational institutions are not producing enough graduates to meet the demand for mentally ill patients.

In the field of nursing for example, the American Association of Nurse Practitioners estimated 20,000 new nurse practitioners completed their academic programs in 2014-2015, but only 3 percent specialized in the



Susan Calloway, PhD, PMHNP, FNP, is director of the new psychiatric mental health nurse practitioner program in the School of Nursing.

i-C

field of family psychiatric mental health, and only 2 percent specialized in the field of adult psychiatric mental health.

Adding to the difficulty, providers are often distributed unevenly across the state, resulting in differential access to care by region, especially in rural communities and areas along the border.

To help improve access to medical care, the new track is pioneering courses in telehealth, which uses telecommunications technology to deliver virtual medicine, health and education services. Calloway said a knowledge of telehealth regulations, standards and procedures will better equip graduates to connect with rural communities.

"Telehealth has grown exponentially," Calloway said. "Knowledge of regulations, ethical issues, best practices for telemental health and establishing a practice in telehealth is essential in preparing graduates to meet the demand for mental health services. The use of telehealth is expanding rapidly and unfortunately many psychiatric care providers have added this to their practice without any formal education. The graduates at TTUHSC will be prepared to practice legally, ethically and safely in telemental health."

Lindsay Urban, BSN, (Nursing '15) is looking forward to learning about telehealth because she understands its potential for reaching those in need of mental health care. Urban said her hometown of West, Texas, had a couple of physicians when she was growing up, but seeing a specialist meant traveling about 30 miles to Waco. Now as an RN in Lubbock, Urban said she meets patients who struggle with the same scenario.

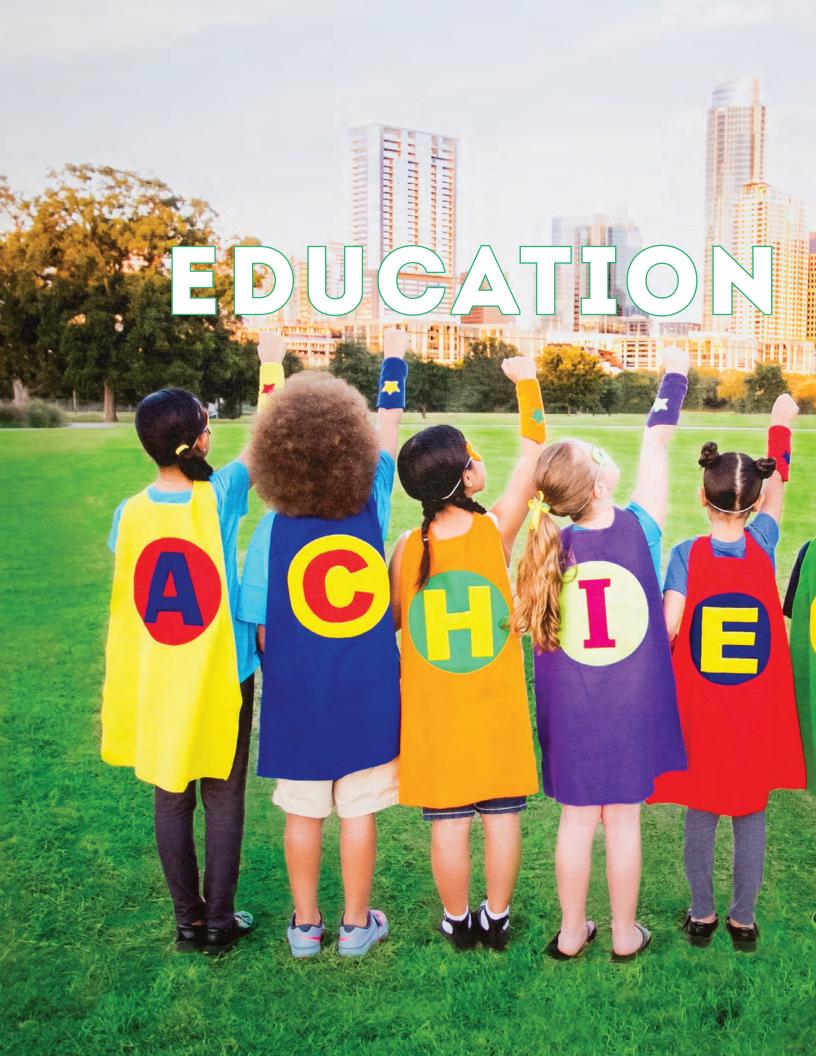
"There are lots of people that have to drive hours to come into Lubbock," she said, "and that's so difficult if you're having to go to monthly appointments."

Urban earned a bachelor's degree in psychology before attending nursing school and is eager to continue her education with a master's in psychiatric mental health through this new track. She struggled with depression as a teenager and wants to help adolescents and families as a nurse practitioner.

"I was a little bit overweight, and I got bullied by some of my classmates," Urban said. "That was a really tough time in high school and middle school going through that, so it's really made me appreciate the field of mental health."

Merrill said the new track is full of students with stories like Urban's: nurses who are currently working but want to offer extra care and expertise in mental health for their patients.

"They have rich clinical experiences," Merrill said, "but now they want to bring something back to their community, and this program will allow them to do that. We didn't just start this (program) and develop it overnight. It has been a vision for a long time, because this is what we need for better health."





# WORKS

BY TOBY BROOKS | PHOTOS BY JOHN WEAST

It has been said that dreamers plan while doers achieve. For TTUHSC Master of Occupational Therapy (MOT) alumnae Caroline (Parks) Morlan ('08) and Erica (Hoover) Tally ('08), the dreaming began in the classroom and therapy labs. But the doing culminated with the establishment of Achieve Pediatric Therapy & Rehab.

The two had crossed paths prior to beginning their studies in occupational therapy but certainly had no idea of what the future would hold for their friendship — let alone their burgeoning business partnership.

A Tomball, Texas, native, Morlan had enrolled at TTU as an undergrad and was drawn by the fast-track program that would eventually lead her across the Marsha Sharp Freeway to TTUHSC and the master's in occupational therapy program. For Albuquerque, New Mexico, native Tally, the ability to head east to Lubbock while still getting in-state tuition led her to TTU as an undergrad, but volunteering in a few children's hospitals later cemented her dreams of working as an occupational therapist. Membership in a service organization at TTU established a familiarity between the two, but it was the occupational therapy program that formed their friendship.

"When we showed up to new student orientation, there was this sea of people, and Erica was the only familiar face, so that's probably where it really began," said Morlan.

"Once classes started, we were together along with our classmates almost every day. But in one class in particular, the two of us were working together on a group project where we had to develop a mock business plan and budget as if we were staring our own practice," added Tally.

That single class project laid the foundation for a clinic the duo would establish four years later. But it certainly didn't happen without a lot of hard work and dedication.









TTUHSC Master of Occupational Therapy 2008 alumnae Caroline (Parks) Morlan, OT, and Erica (Hoover) Tally, OT.

## THE SNOW DAY THAT CHANGED EVERYTHING

"After graduation, Caroline was working as an outpatient therapist in Houston while I was working in an early childhood intervention and outpatient therapist position in Dallas," Tally recalled. "I remember thinking that it might be great to actually build that practice we did for our project back in OT school. One day I was home due to a snow day, and I decided to call and see if she was interested in the idea," she added.

Intrigued, Morlan talked the idea over with her husband, Josh, while Tally did the same with her husband, Clifton. "After talking it over and thinking hard on it, everyone was fully supportive, and we decided to do it," Morlan said. And with the help of a well-timed continuing education course detailing the steps to establishing a private practice, the pair worked diligently until finally opening their doors for their first patient at the new clinic in Cedar Park, Texas, in September 2012.

"We knew we wanted to work with pediatric patients, and we both were wanting to live somewhere that has lots of opportunities for being active and enjoying the outdoors," Tally said. After investigating further, the pair discovered that not only did the Cedar Park/Round Rock area provide ample opportunities for such a lifestyle, but also its rapid growth of young professionals meant that a pediatric practice would be a perfect fit.





#### **PREPPED FOR SUCCESS**

Both Morlan and Tally are quick to credit their professors in the occupational therapy program for not only planting the seed to establish their business, but also for cultivating the knowledge and skills that has helped them be successful in most any setting.

"I remember thinking that our project wasn't really realistic and that it would never really happen," recalled Morlan. "But it worked. Our program was personal enough that each faculty member knew who you were as a person and knew how to build you up, and those assignments got the ball rolling and opened my eyes to possibilities I had never considered before," she added.

"Our entire faculty was fantastic, and I can't choose a favorite, because they all played a different and unique role," Tally concurred. "And when you add that with a great group of classmates, it just made for a great program all around. We still have girls weekends where some of us get together to catch up, so those friendships that were formed in class continue to grow to this day," she said.





#### **A DIFFERENT PERSPECTIVE**

Now heading up a staff of 15 employees — including six occupational therapists, two physical therapists and four speech and language therapists — Morlan and Tally have been involved in the hiring process as business owners rather than simply job applicants. And while they readily acknowledge that their staff is diverse, strong and highly skilled regardless of where they were trained, they are both quick to complement TTUHSC grads.

"We've hired two Tech grads, and what stands out most to me is that they have solid clinical skills and clinical thinking, and they are consummate professionals. All are points of emphasis in the program, and it shows through even during the interview," Morlan said.

Tally agreed. "They definitely stand out, and we know they are wellprepared when they have finished that program."

Given the chance to provide their benefit of hindsight to current students, both are prompt to provide the same encouragement that was offered to them by their faculty just a few years ago.

"I think students need to dream big and set their sights high. There is absolutely nothing wrong with being a staff therapist, but we are proof that if you apply your knowledge and work ethic, you're capable of other things. Trust that," Morlan concluded.

"Never lose the drive to continue learning, either," Tally added. "Experiencing new things is how we all continue to improve and achieve," she said.

And achieve they have. Their practice has been recognized as one of the top Cedar Park occupational therapy practices as verified by opencare.com and continues to flourish as word of their patient and family-first approach has spread across the region.

And to think it all started when two aspiring young professionals separated by nearly 900 miles during childhood happened to be paired together in Lubbock for a group project.

Looks like they both deserve an A.

## Building Bridges TO DOWN SYNDROME

By Nadia M. Whitehead | Photos by Raul De La Cruz

A personal experience with Down syndrome led Emily Moody, a second-year medical student at the Paul L. Foster School of Medicine, to engage health care professionals and people with disabilities.

Emily Moody, a fourth-year medical student at the Paul L. Foster School of Medicine, air high-fives a friend with Down syndrome at GiGi's Playhouse. She and fellow medical students frequently host game nights at the playhouse. El Daro, Texas

Emily Moody and friends take a selfie.

Emily Moody knows firsthand that working with Down syndrome can be challenging. Her sister, Melissa, was born with the genetic condition, launching the Moody family on a journey to learn how to manage Melissa's special needs.

This personal tie to Down syndrome has shaped Moody's perspective as a medical student at the Paul L. Foster School of Medicine. Today, she actively encourages doctors and fellow students to engage more with people with disabilities.

"It's important for medical students to go and volunteer with kids with disabilities, and it's okay to feel uncomfortable at first," Moody said. "The exposure is going to make them better doctors. As medical professionals, if we encounter someone with a disability, we need to know how to communicate with them — not just their parents."

To promote this interaction, Moody organizes bimonthly volunteer events for medical students at GiGi's Playhouse, an achievement center for individuals with Down syndrome. Students have helped with bingo nights, miniature golf, movie outings and variations of "I Painted That," a painting-themed social mixer.

"It's great to see the medical students relax and have fun when they volunteer at GiGi's," Moody said. "It just feels like one big family hanging out." Moody's family actually spearheaded bringing GiGi's Playhouse to El Paso. When Moody was a second-year medical student, she and her family raised more than \$100,000 for the Down syndrome specialty center. The center, which was the first of its kind in Texas, opened in 2015 because of their efforts.

GiGi's Playhouse has even attracted the attention of the pediatric residency program at TTUHSC El Paso. The playhouse is now one of the sites that pediatric residents are required to visit as part of their rotation schedule.

Today, the center helps more than 300 El Pasoans living with Down syndrome, and Moody and her family are still actively involved. Local families enroll their loved ones in free weekly programs that help with skills like math, reading and communication. More than 300 volunteers help keep the center running at this rate.

Moody is happy to see that El Paso and the medical community have embraced GiGi's Playhouse.

She said, "We need to change the way that people with Down syndrome are viewed and that starts by building a relationship with them."

# TWENTY YEARS and counting



By Mark Hendricks

### LONGTIME PROFESSOR RECALLS THE FIRST TWO DECADES OF THE SCHOOL OF PHARMACY

n many ways, it was a typical summer morning in the Texas Panhandle when the School of Pharmacy opened its classroom doors for the first time in August 1996. However, the program that took root on that dusty plot of West Texas prairie 20 years ago has been anything but typical.

As the first public pharmacy school to open in the U.S. in decades — and the first TTUHSC school whose main campus wasn't located in Lubbock — there was a certain pioneering spirit that permeated the hallways. Enthusiasm and excitement surged through the 64-member founding class, and the school's first faculty members shared those feelings.

Wisconsin native Sherry Luedtke, PharmD, was one of those founding faculty members. She had just completed her pediatric specialty residency at the University of Kentucky when she heard TTUHSC was recruiting for its new pharmacy program. Luedtke had earned her PharmD from the University of Wisconsin-Madison School of Pharmacy and learned that two of her former professors, the late Chester A. (CAB) Bond, PharmD, and Cynthia Raehl, PharmD, were heading to Texas to help get the new pharmacy school up and running.

"The opportunity to begin an academic career at a new pharmacy school with no walls to breakdown and become part of a fresh approach to how a strong clinical doctor of pharmacy program should be delivered was exciting," Luedtke recalls. "I interviewed with other established programs at which I felt a sense of elitism. At (TTUHSC) there was a true sense of community and an attitude that everyone's contribution was valued. It was also amazing to see the pride that the local community had in bringing the School of Pharmacy to Amarillo."



#### FINDING THE RIGHT PEOPLE Luedtke

was one of many faculty recruited to the School of Pharmacy by founding dean Arthur A. Nelson, PhD, RPh. Nelson came to TTUHSC from Pocatello, Idaho, where he had served as dean for the Idaho State University College of Pharmacy.

Almost immediately after his arrival in 1993, Nelson began seeking some of the nation's top pharmacy educators, clinicians and administrators like Bond, Raehl, Butch Habeger, RPH, MBA, Ranee Lenz, PharmD, and Roland Patry, DrPH, FASHP, to piece together the practice component of the new school's curriculum. For the sciences component, Nelson sought out up-and-coming pharmaceutical scientists like Jim and Carolyn Stoll, PhD, David Allen, RPh, PhD, and Quentin Smith, PhD, BA, a renowned blood-brain barrier researcher who would become the school's second dean when Nelson retired in 2012.

Luedtke says the concept of scientists and practice faculty working together on teaching teams was a new idea that utilized the strengths of each team member to deliver a well-rounded curriculum. She says applying case-based learning and emphasizing experiential learning during all four years of the program were all new philosophies that were adopted into the new curriculum.

"Clearly, Dean Nelson recruiting the right leadership team to draft the curriculum and recruiting young enthusiastic faculty were key," Luedtke adds. "Since we were starting fresh, we were able to throw out the 'butthat's-the-way-I-was-taught' attitudes and our faculty were all on board for implementing new strategies. Everyone was completely open to trying to learn new teaching strategies and adapt as needed."

During the School of Pharmacy's early years, Luedtke says the faculty was a small and tight-knit core transplanted to Amarillo from across the country. They struggled together, celebrated together and were bonded together like family. And like a family, she says it was always bittersweet whenever one of those early faculty members left the TTUHSC fold to accept opportunities elsewhere.

"I cherish all of the memories we made together, from our 'mishaps' with technology, our creative problem solving on the fly and football games against the students, to our elation at seeing our first class graduate through the program," Luedtke said. "We learned a lot about each other — and ourselves — in those early years."

## "WE LEARNED A LOT ABOUT EACH OTHER – AND OURSELVES – IN THOSE EARLY YEARS."





**THE PAST BECOMES THE FUTURE** As the School of Pharmacy begins its third decade, Luedtke says the biggest challenges for her and many of her colleagues have come through the program's expansion to multiple campus sites and a class size that has increased to 155 students.

"Initially we only had 64 students and I can say I knew every one of their names," Luedtke says. "As we expanded, challenges in delivering the same content, active engagement in the classroom and developing the same relationship with the students arose.

"I think the trend for many new schools opening, often for financial reasons rather than need, have changed the face of pharmacy education — surprising since before TTUHSC opened the School of Pharmacy there had not been such an occurrence or concern."

In the classroom, Luedtke says faculty and staff have had to transition to distance learning techniques for educating students across multiple campus sites. They have also collectively embraced the merits of interdisciplinary teaching, the utilization of clinical simulations and the trend toward creating active learning environments. She says the school is in the midst of a curricular renewal process that will further expand these strategies and allow faculty to increasingly engage students in their own learning to a greater degree.

"Clearly, the changes in health care coverage and the expanding role of pharmacists as providers will have a huge impact on the future of our graduates," Luedtke stresses. "It is important that we assess the current and future needs of our students and continue to evolve our curriculum to ensure our students success in the years to come. Along with that, we need to recruit students who are aware of the changes forthcoming and are willing to move forward with them, because they need to go out and be the leaders of the profession just like our graduates of 2000 did."

Despite all of the changes and expansions, additions and subtractions, Luedtke says the School of Pharmacy and its faculty remain as committed today as they were in the beginning.

"There are no other schools that I am aware of that maintain this dedication to clerkship teaching, and I believe this shows in the quality of our students clinically," Luedtke says without hesitation. "I am amazed at some of the accomplishments our alumni have made in a very short time within the State of Texas and beyond. I am often told the phrase "Tech Pharmacy Alumnus" is synonymous with strong clinically trained pharmacists and leaders. That makes me believe that all the hard work put into the program for the last 20 years has paid off."



## A Life of service

Biomedical Science Alumnus, TTUHSC El Paso Medical Student Has Humanity in His DNA

By Sergio Ramírez

A s a child, Servando Rivera, MS, heard all the stories. His mother, a nurse from Durango, Mexico, never had a shortage of experiences to share. The one that always stuck out was the choking neighbor who she performed life-saving CPR on one Christmas night.

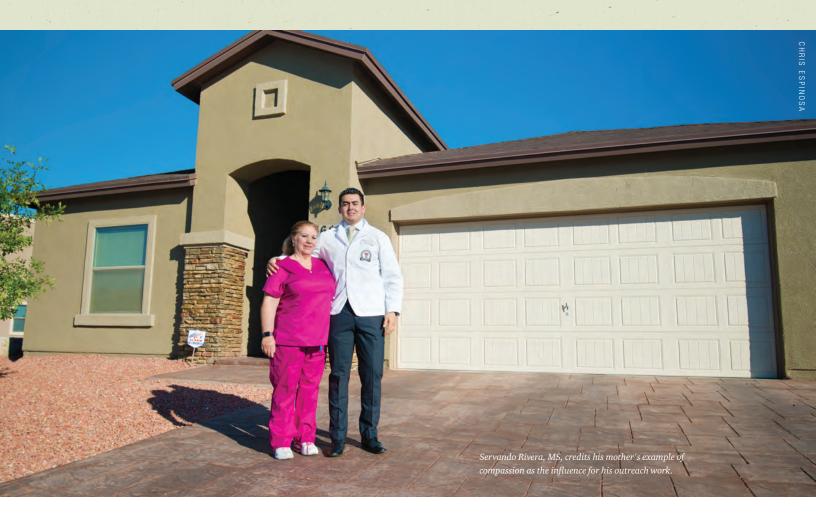
"I'd like to think I inherited my compassion from her," said Rivera (Biomedical Sciences '15). "During the little free time we had growing up, she was always available to help others."

Now, as a medical student at the Paul L. Foster School of Medicine, he finds himself in the situations that he heard about as a child. Rivera, like his mother, occupies much of his free time volunteering.

"Improving patients' health and making a change for those in need is my motivating force," Rivera said. "Volunteering at the RotaCare Clinic or providing sports physicals to school-age children at the student-run clinic means a lot to me."

Rivera is dedicated to serving his home community — spending most of his volunteer hours in local clinics — and is equally dedicated to his medical education. The aspiring doctor graduated from high school at just 16 years old.

"I've had opportunities to leave El Paso, but as somebody who's familiar with the border community and the Spanish language, I know I have a huge opportunity to contribute to the border's health transformation; it's almost an obligation."



"I've had opportunities to leave El Paso, but as somebody who's familiar with the border community and the Spanish language, I know I have a huge opportunity to contribute to the border's health transformation; it's almost an obligation."

Rivera witnessed firsthand what many English language learners from Mexico have experienced: inaccessible health care due to communication barriers. When his grandmother became gravely ill, Rivera was able to eliminate the problem for his family.

"I stepped in and became a language bridge, connecting my grandma and her doctor," he said. "And although I had a challenge translating medical terms at the time, my goal since has been to enhance those integral parts of practicing medicine effective communication." Like many other students from the Paul L. Foster School of Medicine, Rivera started his medical education with TTUHSC El Paso as an intern in the Summer Accelerated Biomedical Research (SABR) program. Offered through the Graduate School of Biomedical Sciences (GSBS), the SABR program gives aspiring medical researchers an opportunity to intern under a team of GSBS scientists. While in the SABR program, Rivera developed a close relationship with GSBS Dean Rajkumar Lakshmanaswamy, PhD, who eventually became a mentor in his mission to give back.

"Being able to speak with the region's young minds about science and research was overwhelming for them, and me too," Rivera said. "At Marion Manor Elementary School, students were struck with awe to have a scientist in the room. That will stick with me for a long time."

It's a lifelong string of events like these that have tied Rivera to the medical profession.

"I have never felt so determined that the life of a physician is what I want."



#### Former Resident, Alumnus Among Top Physician Leaders of Hospitals

Former TTUHSC El Paso resident Toby Hamilton, MD, has been recognized in the Becker's Hospital Review list of "110 Physician Leaders of Hospitals and Health Systems." The list stands out from others because the review requires selected presidents and CEOs to also hold medical degrees. Hamilton, a co-founder of Emerus Holdings Inc., based in The Woodlands, Texas, led a small group of entrepreneurial physicians operating a single emergency room to create a national movement of micro-hospitals.

"It is humbling to be recognized among the nation's top health care leaders," said Hamilton (TTUHSC School of Medicine '00; TTUHSC El Paso Emergency Medicine Resident '03) . "This honor truly reflects the commitment of each of our employees to providing a better, more compassionate patient experience. It also reflects positively on the brand and clinical reputation of the nation's leading health systems with whom we partner."

Hamilton is just one of three Texas leaders named to the list of presidents and CEOs selected from across the country. Most recently, Emerus Hospitals has partnered with The Hospitals of Providence to open a micro-hospital in Horizon, Texas — an area of El Paso County that Hamilton has many familial ties to.

"The experiences I had treating the people of West Texas provided me the perspective that has guided me throughout my career," Hamilton said. "That perspective involved making sure empathetic patient care, regardless of background or circumstances, is at the forefront of every business decision I make."

### TTUHSC El Paso Alumni Recognized for Outstanding Nursing Service

Two Gayle Greve Hunt School of Nursing (GGH-SON) alumni were recently recognized by the DAISY Foundation for their extraordinary service to patients.

Anna Ornelas, BSN, RN, (GGHSON '14) practices in University Medical Center of El Paso's surgical department. Ornelas is a firm believer in communicating what she is doing and why, which helps build trust between patients and their health care teams. "I like to remind patients that they are doing their part seeking medical attention and taking care of their health," she said.

Like Ornelas, Kuan Wong, BSN, RN, (GGH-SON '14) finds satisfaction in building rapport with his patients and their families. "The most important aspect of what I do for my patients and their families is give a good first impression," said Wong, a nurse at Del Sol Medical Center in El Paso.



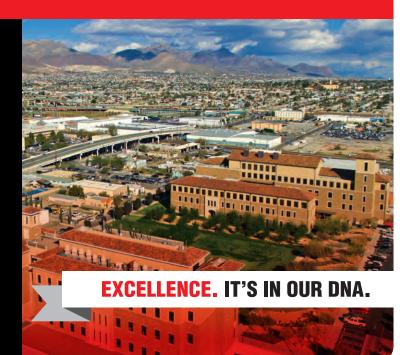
To learn more about the DAISY Awards, visit daisyfoundation.org.

## We want to hear from you!

Send your professional and personal updates to alumni.ia@ttuhsc.edu.







## friends we'll miss

P. Michael Conn, PhD, died Nov. 26, 2016. He joined TTUHSC in December 2013 as senior vice president for research and associate provost.
He also held a joint appointment as professor in the School of Medicine departments of Internal Medicine and Cell Biology and Biochemistry.
Julia "Judy" Jones Matthews died Nov. 17, 2016. She was co-founder of the Dodge Jones Foundation in Abilene and served on its board.
Clay Wood died Aug. 19, 2016. The benevolence and generosity of Wood and his late wife, Louise, provided numerous gifts in the Permian Basin, including the Louise and Clay Wood Simulation Center.

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.

#### **TTUHSC Surgeons Take Local Lead in Lifesaving Campaign**

One of the lessons learned following the Boston Marathon bombing and the Orlando nightclub shooting was the key to saving lives is to stop the bleed quickly, said Sharmila Dissanaike, MD, (Resident '06) a surgeon with Texas Tech Physicians and chair of the School of Medicine Department of Surgery.

That's the reasoning behind Stop the Bleed campaign, a training for personnel in schools and workplaces to teach the basics of controlling bleeding from arms and legs, primarily using a tourniquet. Additionally, participants are taught how to stop bleeding from the head or trunk. Stop the Bleed kits containing easy-to-apply tourniquets and compression bandages have been created and are distributed during the sessions.

Lubbock was one of the first regions in Texas to implement the campaign by training personnel in schools and other workplaces. Texas Tech Trauma Surgeons, Trauma Service Area-B (B-RAC), UMC

### Dent to lead national nursing organization



Congratulations to Bob Dent, DNP, RN, (Nursing '10) who was elected as 2017 president-elect of the American Organization of Nurse Executives (AONE) Board of Directors. Dent is the senior vice president, COO and CNO of Midland Memorial Hospital.

He is past chairman of the AONE Foundation

and a past board member of the Texas Organization of Nurse Executives. Additionally, he serves on several nonprofit and university boards, including the TTUHSC Alumni Association National Advisory Board.

A. Griswold Trauma Center and assistant medical director of the Timothy J. Harnar Burn Center at UMC Health System.

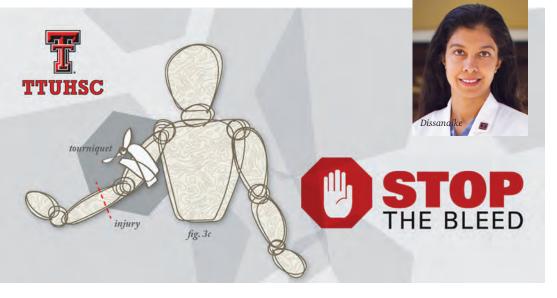
"Most men, women and children who die from mass shootings will do so from bleeding, and much of the blood loss happens in the first few minutes after the shooting," Dissanaike said. "Time is of the essence, and transporting victims to their nearest trauma center as soon as possible is essential. However, it also is possible to control many types of bleeding at the scene without a lot of specialized equipment; this in turn buys the patient time until a surgeon can stop the bleeding permanently."

The end goal is to have Stop the Bleed kits placed in public places similar to defibrillators, as well as have them installed in new vehicles, Dissanaike said.

To learn more, call (806) 775-9315.

Emergency Medical Services and UMC's John A. Griswold Trauma Center have taken the leadership role in educating health care providers to train the general public.

Since time is of the essence, training civilian bystanders who are already at the scene to apply basic techniques to control bleeding has become one of the biggest focus areas of this campaign, said Dissanaike, who also is the chair of the TTUHSC Department of Surgery, medical director of the John



### A Note From the TTUHSC Alumni Association



As chairman of the TTUHSC Alumni Association National Advisory Board, I am truly honored and humbled to represent such a prestigious organization. Without our 20,000-plus alumni, TTUHSC could not be the No. I ranked university for graduate schools in the USA.

Alumni like you have an established presence nationwide, as well as in almost two-dozen territories and overseas countries. The world-class education you received at TTUHSC has shaped your health care careers and through your respective professions you have positively impacted millions of lives.

I believe all of our lives are enriched not only by this past connection to TTUHSC but also by a continuing relationship with the university and fellow alumni. Our alumni association exists to develop and support the community

we share. Specifically, we help you keep in touch and engaged with other alumni (both old friends and new), campus activities and student life.

I hope that you stay connected with TTUHSC and that you will show your support by becoming a member of the TTUHSC Alumni Association, informing the Office of Alumni Relations of your contact information and post-graduation accomplishments, and by contributing to the Your Life, Our Purpose campaign.

Best Wishes,

Greg Thompson, MBA, MT, ASCP (Health Professions, Medical Technology '02)





Join TTUHSC Alumni Association today: www.ttuhscalumni.org/membership



If you are not a part of the TTUHSC Alumni Association social network, join us. This is a great opportunity for you to learn about upcoming events, keep in touch with old classmates, post updates on news in your world, and more.

### 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 www.ttuhsc.edu/alumni/stethoscopes.aspx to learn more



















1 TTUHSC honored past and current service men and women on Veterans Day with a morning salute; a Veterans Resource Fair followed. 2 A new tradition began at the annual School of Medicine Scrub Party as incoming students received TTUHSC-branded stethoscopes courtesy of alumni donors along with their first set of scrubs. The Office of Alumni Relations and the School of Medicine sponsored the scrubs and the event. 3 Incoming pharmacy students take their oath of service during the annual White Coat Ceremony. The school held the first ceremony in 1996. 4 Wynona Judd greeted School of Nursing faculty, alumni and staff before her keynote address at the school's 35th anniversary gala. 5 TTUHSC Alumni Relations joined Student Affairs in welcoming students to campus for the fall. Here's a "Guns Up" from Dallas students. 6 TTUHSC EI Paso residents enjoyed a barbecue event with food, music and games. The annual event allows residents time to mingle with each other and their families in a fun environment. 7 TTUHSC EI Paso Times and the community about the new clinic and teaching hospital during a Facebook Live event. Texas Tech Physicians of EI Paso at Transmountain is located next to the new 108-bed hospital in far west EI Paso. Watch the interview at http://bit.ly/2hBwEGf. 8 Jeremy Stewart, the first TTUHSC EI Paso



student regent to be appointed to the TTU System Board of Regents, attended his first meeting in September. He will serve for one year. Stewart was appointed by Gov. Greg Abbott and represents 50,000 students across the TTU System. 9 TTUHSC El Paso Graduate School of Biomedical Sciences welcomed its inaugural class. This is the first time all academic programs are being offered exclusively through TTUHSC El Paso. 10 Students from the Paul L. Foster School of Medicine received their first pair of scrubs at the Scrubs Party, hosted by the TTUHSC El Paso Office of Alumni Relations. The event has become an annual tradition and takes place during orientation. 11 More than 200 students volunteered in the Lubbock community on the first-ever TTUHSC Day of Service in November. The goal of the day is to promote interprofessional collaboration through service and community. 12 Guests had a freaky fun night with TTUHSC President Tedd L. Mitchell, MD and Janet Tornelli-Mitchell, MD, at their annual Halloween party.

## ALUMNI PROFILES PAUL L. FOSTER SCHOOL OF MEDICINE



Administrative Chief Resident of Obstetrics and Gynecology Baylor University College of Medicine, Houston, Texas Graduate: 2013

> **BORDER BEGINNER:** Bailey Wilson Escarzaga, MD, arrived in El Paso, Texas, in 2009 with no ties to the region. Border culture and Spanish were new to the aspiring physician, but that's what attracted her to the Paul L. Foster School of Medicine (PLFSOM). Wilson graduated in 2013 as a member of the school's inaugural class.

**FROM HARDSHIP TO INSPIRATION:** Though Wilson (the name she uses professionally) was inspired by many to pursue a career in medicine, it was her mother's battle with stage 3 breast cancer that drew her to women's health.

"When I was 5 years old, I remember spending a lot of time with my mom at hospitals throughout her chemo," Wilson said. "That experience sparked incredible interest in me to study medicine."

Now nearing the age of her mom when she was diagnosed, Wilson is set to complete her residency later this year — although it hasn't been an easy journey.

After a BRCA genetic test revealed mutations in Wilson's genes that increase her risk of developing breast cancer, she opted for a prophylactic mastectomy.

"I wanted to get the preventive procedure done, and I was finally able to in 2016," Wilson said.

**CARE FROM EXPERIENCE:** Preventive medicine is now something Wilson can speak to from personal experience. And she can emphasize the importance of preventive medicine for women — in Spanish, too.

"I don't have to use a hospital translator," Wilson said. "My husband, who is from El Paso, and my time at the PLFSOM have helped me develop a strong connection to the culture."

Wilson plans to pursue a career in academic medicine upon completion of her residency. The lessons from her training inspired her to give back through education.

BY SERGIO RAMIREZ

Cynecology

#### ALUMNI PROFILES GAYLE GREVE HUNT SCHOOL OF NURSING



**DESTINED FOR SERVICE:** Saaghe Fogwe, BSN, RN, has always felt destined to do something special. Born on Christmas Day in Cameroon, West Africa, Fogwe's parents named her "God is with us," a moniker that would later lead her to the nursing profession.

**A CAREER SHIFT:** Before becoming a nurse, Fogwe had an early career as a staff accountant. But after 10 years of "counting other people's money," and feeling pressured to mix with certain social circles just to get ahead, she knew she needed more. It was at that point that she decided to take a risk and pursue a profession that would reward her natural inclination for service.

It didn't take long for Fogwe to decide on a career in nursing. And she knew right away that the Gayle Greve Hunt School of Nursing was the right fit. During her initial phone interview, she felt a special connection with the faculty and was intuitively drawn to the personal, tight-knit culture of the El Pasobased nursing school.

Fogwe worked tirelessly to complete the 12-month Accelerated Bachelor of Science in Nursing program, making some major sacrifices along the way — including sending her kids home to Cameroon while she completed her prerequisite coursework. At one point, she even took 30 credit hours (10 courses) in a single semester.

Graduate: 2012

THE PAYOFF: Now, Fogwe is reaping the benefits; as director of nursing at Kindred Hospital in Dallas, Texas, her favorite part of the job is getting to put a smile on patients' faces. In her current role, Fogwe gets to bring personality to the medical profession, serve as an advocate for patients, and help resolve cultural and family issues that doctors sometimes overlook.

Now that she has settled into her new career, Fogwe's next goal is to pursue a Doctor of Nursing Practice.

Her advice for anyone considering a career in nursing: Assess your options carefully, take note of prerequisite requirements and work hard. Most of all, go to a school where you don't feel like a number- but where you are known by your name.

BY RACHAEL PAIDA

#### ALUMNI PROFILES SC

SCHOOL OF PHARMACY



**EVERYBODY KNOWS YOUR NAME:** Being a solo practitioner at Grand Pharmacy has given Mario Hernandez, PharmD, the opportunity to get to know many of his customers by name. It's important to them, and to him, which is one of the reasons he chose to join the independent pharmacy three years ago.

Knowing one another on a first-name basis, Hernandez said, provides a certain level of comfort for the customer to discuss health concerns or ask questions. "It's important that they see me as a resource for their health care," he said. "I see many of them on a monthly basis, where they don't see their physician but maybe twice a year."

The retail pharmacy profession has come a long way since Hernandez graduated in the School of Pharmacy's first class. "It's no longer a job of just counting pills; the focus has turned to one more concentrated on the clinical setting," he said.

**HEALTH CARE IN THE NEIGHBORHOOD:** At Grand Pharmacy, Hernandez manages a state-supported immunization program for children as well as a medication therapy management program funded by Medicare. In both cases, the opportunity for patient interaction and education is something that Hernandez finds fulfilling.

"The patients seem to enjoy and appreciate someone who has time to discuss their medications with them," he said.

MARIO HERNANDEZ, PHAR Pharmacist, Co-Owner Grand Pharmacy, Amarillo, Texas Graduate: 2000

Hernandez found the appeal of an independent pharmacy after working for corporate retail more than 12 years. "I like being my own boss and having a say in what gets done and how."

Additionally, Grand Pharmacy fills a niche in this northeast Amarillo neighborhood, he said, where unlike other areas of town, pharmacies are as sparse as trees on the West Texas plains. Until Grand Pharmacy opened in 2013, the area had been without a pharmacy for almost a year. Today, the closest competitor is still about five miles away.

**WHERE THERE IS A NEED:** It's been a slow, but steady start, Hernandez said. In September they filled about 3,500 prescriptions — about a third of what he filled in the given time frame at his previous position with United. But, Hernandez and the other three partners believe they are filling a void in this underserved area.

For now, Hernandez wears multiple hats — pharmacist, store manager and chief marketing officer. It's been the most challenging, yet most rewarding position, he said, and one that is well worth the effort.

BY DANETTE BAKER

#### ALUMNI PROFILES SCHOOL OF HEALTH PROFESSIONS

California -

#### JAMIE REYNA, PA

Physician Assistant Rettig Family Health Care, Groesbeck, Texas Graduate: 2012, Physician Assistant

OHN WEAST

**SERVICE TO COUNTRY:** After graduating high school with high honors from Foxcroft Academy in Dover-Foxcroft, Maine, Jamie Reyna, PA, enlisted in the U.S. Army and began an eight-year military career. While enlisted, Reyna served as a Combat Medic in the 229th Aviation Regimen and was deployed to Bagram, Afghanistan, in 2003 as a part of Operation Enduring Freedom. During her experiences both stateside and abroad, Reyna began to strongly consider goals following military service, knowing that those early exposures to medical care as a medic had uniquely prepared her to pursue a medical career. Following an honorable discharge in May 2010, Reyna enrolled in the Physician Assistant Studies program.

**SERVICE TO PATIENTS:** Currently, as a member of the team at Rettig Family Health Care in Groesbeck, Texas, Reyna provides primary care and delivers a wide array of basic and intermediate health care services to a diverse patient population. The clinic's rural health care focus provides Reyna with ample opportunities to utilize the skills she incorporated into practice as a combat medic as well as the more advanced concepts and strategies she has since learned including well-check health screenings, cardiovascular screenings and assessments, and vascular health assessments as well as diagnostic testing and pharmacological intervention.

**NOW AND THE FUTURE:** "I treat my patients like family members," Reyna said. "It isn't always fun to be a provider with long days and challenging cases, but by putting my patients first, I am confident that we can provide them with the best possible health care experience." In addition to her work at Rettig Family Health Care, Reyna is also slated to begin part-time work soon at a local urgent care facility, allowing her to deliver care in an environment different than the typical family practice clinic. She also has plans to grow and expand her business in equine training and breeding.

BY TOBY BROOKS

#### ALUMNI PROFILES SCHOOL OF NURSING



ABI PROVENCE, BSN, RN, CEN, CPEN Full-Time MSN Student Texas A&M University Corpus Christi

**KEEPING BUSY**: Sitting at a round dining table covered with textbooks, highlighters and spiral notebooks, Abi Provence, BSN, RN, CEN, CPEN, laughs when asked about her hobbies. As a single mother of two currently pursuing her MSN, Provence said she has little time for anything else.

"I survive on coffee," she jokes.

**TAKING THE ROAD LESS TRAVELED:** After leaving an abusive marriage 16 years ago, Provence lived in a shelter for victims of domestic violence. The pastor of the church she was attending found out about her situation, and he and his wife took Provence into their home.

Needing a way to support herself and her daughter, Provence pursued nursing. After earning her associate degree in Nursing, she began her career in 2004 as a staff nurse at Methodist Dallas Medical Center, eventually earning a bachelor's degree and working through new certifications to become Emergency Department manager of a Level 1 Trauma Center. Along the way, she was recognized as a DFW (Dallas/ Fort Worth) Great 100 Nurse and DFW Hospital Council Employee of the Year.

**FINDING FULFILLMENT:** Feeling the need to give back to the community, Provence started a mission project within Safe Haven of Tarrant County, the very shelter she stayed in 16 years ago. Every month, she does a themed-activity with the children at Safe Haven, such as face painting, a book drive, cookie decorating or a visit from Batman.

"It is just a way to provide a bright spot for them, because I've lived it, and I feel like I need to somehow give it back," Provence said. "I believe with all the abilities and talents God's given me, my response is to love God, love others and serve the world."

BY HOLLY LEGER

ALUMNI PROFILES GRADUATE SCHOOL OF BIOMEDICAL SCIENCES



**BLAZING A TRAIL:** Robin L. Cooper, PhD, enrolled in one the first courses TTU offered in neuroscience, studying the function of the human nervous system and brain. "We were learning about this which was taking off at that time. We were seeing the first labs focused on neuroscience. It was an exciting time in my education."

Cooper's trail took him to the Middle East and Europe, travelling solo, with a backpack, train schedules and directions to hostels. Returning to the chemistry labs at TTU for graduate work, and later to TTUHSC for his PhD, he befriended a Korean student, with a sister needing to work on her English (as a second language). Kismet happened, and Cooper and his wife, Hye Won, have been married 30 years.

IT'S THE LITTLE THINGS: Cooper's research focuses on the synapse of the brain, a structure that permits a nerve cell to pass an electrical or chemical signal to another nerve cell. "It's a connector between the brain and our thoughts or the brain and commands of the nervous system. An example is the connection needed when the brain tells an eye to blink."

Using fruit flies and crayfish, Cooper's lab studies aging, the basic science of the nervous system, how proteins mutate, and how proteins are expressed in the heart and others.

Associate Professor, Neurobiology/Neurophysiology University of Kentucky, Lexington, Kentucky Graduate: 1989, Physiology

"The crayfish and flies have similar proteins as our brains. We can study 60 human diseases in these fruit fly specimens. Aging in the fruit fly models human aging. We are looking at the connections and finding ways to use the research to understand our brain connections better."

**LEARNING** ... **ALWAYS:** Teaching new scientists is one of Cooper's passions. He mentors undergraduates and high school students. "I love to promote students and spark their interest in neuroscience. It is a real joy when they 'get it.' In fact, one of our high school researchers is submitting a paper as first author!"

He has continued learning, as well. "I realized I studied pure science and not much else. I took courses in art, anthropology, rappelling and ROTC while starting grad school at TTU." And in 2011, Cooper passed his exam as a registered nurse and the following year, completed his bachelor's degree in nursing while being a research professor at University of Kentucky.

BY JO GRANT LANGSTON

#### ALUMNI PROFILES SCHOOL OF MEDICINE



#### RONNELLE BURLEY, MD

Private Practice OB/GYN Lubbock, Texas

Graduate: School of Medicine Residency, 1994-98

**FROM FLORIDA TO TEXAS STATE OF MIND** As a young medical school graduate in 1994, Ronnelle Burley, MD, had her sights set on a residency in Lubbock, Texas. She was ready to trade in flora and fauna of her native Florida for the plains of Texas. More than 20 years later, she calls the South Plains home, flourishing in this corner of the world.

"I have found Lubbock to be a great place to practice medicine," Burley said. "I enjoy the slower pace of this city compared to Florida and, of course, less traffic. I have time to take care of my patients, deliver babies and, at the same time, parent and enjoy time with my two girls."

**BROAD SPECTRUM OF CARE** Burley feels practicing in Lubbock has afforded her the opportunity to operate a well-rounded obstetrics/gynecology practice. And, of course, she has delivered hundreds of babies.

"Every baby is a new miracle, and I am blessed to be a part of those miracles," she said. "The economy hasn't really affected couples wanting to have babies. The cost may have changed, but not the desire to have children. We have plenty of deliveries!"

Burley also enjoys seeing patients through the cycles of life. "I am seeing patients now for menopause issues and other changes due to aging who were my patients when I delivered their babies. It is very satisfying to take care of these women through the years."

AND, A LOVE OF THE ARTS In addition to enjoying her girls' school activities, Burley loves to experience Lubbock's music, theater and art. "This city has much to offer, and we try to take in as much as we can," she said. "The Moonlight Musicals are fantastic, as well as our local theater. The arts help me balance my professional life, my life as a parent and my personal life. Seeing a good production or a movie definitely takes the pressure off."

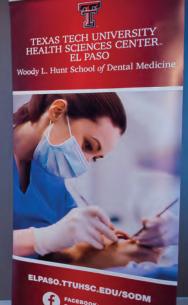
BY JO GRANT LANGSTON



PASO

**TEXAS TECH UNIVERSITY** 

HEALTH SCIENCES CENTER,



FACEBOOK: FACEBO

TTUHSC El Paso President Richard Lange, MD, MBA, Paso del Norte Health Foundation CEO Tracy J. Yellen and Paso del Norte Health Foundation Board Chair Jose Prieto Jr., MD

EL NORTE HEALTH

For more than two decades, the Paso del Norte Health Foundation has supported health and wellness on the U.S.-Mexico border, contributing more than \$152 million to the cause. Now, thanks to its largest grant yet to TTUHSC El Paso, the foundation's reach will go even further.

ORTE HEALT

The Paso del Norte Health Foundation's contribution of \$6 million to TTUHSC El Paso's new Woody L. Hunt School of Dental Medicine is expected to help change the face of health care in West Texas.



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Learn more about the foundation's overwhelming support [and how your gift can impact health care] at elpaso.ttuhsc.edu/ia/paso-del-norte-health-foundation.aspx

## Flatined How Lubbock Revived Calvin Clark's Quality of Life



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

The things people are passionate about are not random. They are a calling, and for Calvin Clark, MSN, RN, ('10, '07), it was a passion for the natural sciences and a strong desire to help people that led him to the health care field, and ultimately to Texas Tech University Health Sciences Center (TTUHSC).

Upon completion of his undergraduate degree in nursing, Clark stayed to earn his master's and later started his career at University Medical Center (UMC) before becoming a nurse practitioner in downtown Austin.

After five years in Austin, Clark and his wife felt a pull to come back to Lubbock, a pull that Clark likens to Lubbock native Mac Davis' classic tune.

"It's just like the song," Clark said. "But now happiness is Lubbock, Texas growing nearer and nearer.' It really rang true in my life. I moved away, but Austin was really fast-paced. I was spending several hours in the car driving to work, and that adds up over the course of the year. That's valuable time I could be spending with my family."

Couple the lengthy commute time with the quality of life differences, and it was a no-brainer for the Clarks to return to Lubbock.

"The quality of life in Lubbock is much better than in the big city," Clark said. "Your money goes further, people are friendly here, and it's a really great place to raise a family. In the short time I was gone, there's also been a lot of economic development going on around Lubbock. Lubbock has really gotten a facelift in the last 10 to 15 years."

Now a nurse practitioner at UMC, Clark notes that just as Lubbock is growing, the health care industry in Lubbock continues to advance. "The health care industry here is on the forefront of a lot of innovation," Clark said. "A lot of people think Lubbock is just a little West Texas town with no research, but we really have a lot going on here."

Part of what allows Lubbock to stay on the forefront of medicine and technology is the presence of hospitals such as UMC and Covenant, top-notch academic medical centers and an influx of residents.

"When I look at what we have in Lubbock, I see resources plus a huge complement of people that are highly trained in their fields," said Jason Felton, MD, a neurosurgeon at TTUHSC and a Lubbock native. "We see patients who say, 'I've been going to Dallas. I had no idea I could stay in Lubbock and get this done.""

Staying on the cutting edge of medical advancements and technology requires a highly skilled and educated workforce, a top priority for the Lubbock Economic Development Alliance (LEDA).

"One of LEDA's roles is to act as a conduit between job seekers and businesses," said Christine Allen, LEDA's director of workforce development and Foreign-Trade Zone 260. "One way we're doing this is through a web portal – www.return2lbk.org – that serves as a one-stop shop featuring concentrated, valuable job opportunities."

Not only does LEDA provide information and links to a large number of jobs in the health care field, they provide links to other jobs available in the Lubbock community.

"Fortune.com recently listed Lubbock as one of the top 10 cities to find a job," said John Osborne, president and CEO of LEDA. "As Lubbock continues to grow, more and more of our [TTUHSC] alumni and former residents are finding out there are greater opportunities to move back to Lubbock than ever before."

As for Clark, his family has no plans to leave anytime soon.

"Lubbock is really special to me," he said. "This is my first adult home, this is where I met my wife, this is where I have fond memories of developing myself as an adult. After moving away, I really wanted to come back home, and Lubbock really is home for me."

For more available health care positions and other employment opportunities in Lubbock, please visit www.return2lbk.org or call 800.687.5330.

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Some people come into your life and you just never forget them.

Avery Young Rademacher

was one of those people. In November 2015, Avery (Health Professions '09) passed away from a highly aggressive brain tumor.





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