

- + 21ST CENTURY STETHOSCOPES
- + GAME OF HEARTS
- + SOLITARY CONFINEMENT

SUMMER 2019

Pulse

THE MAGAZINE OF TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER



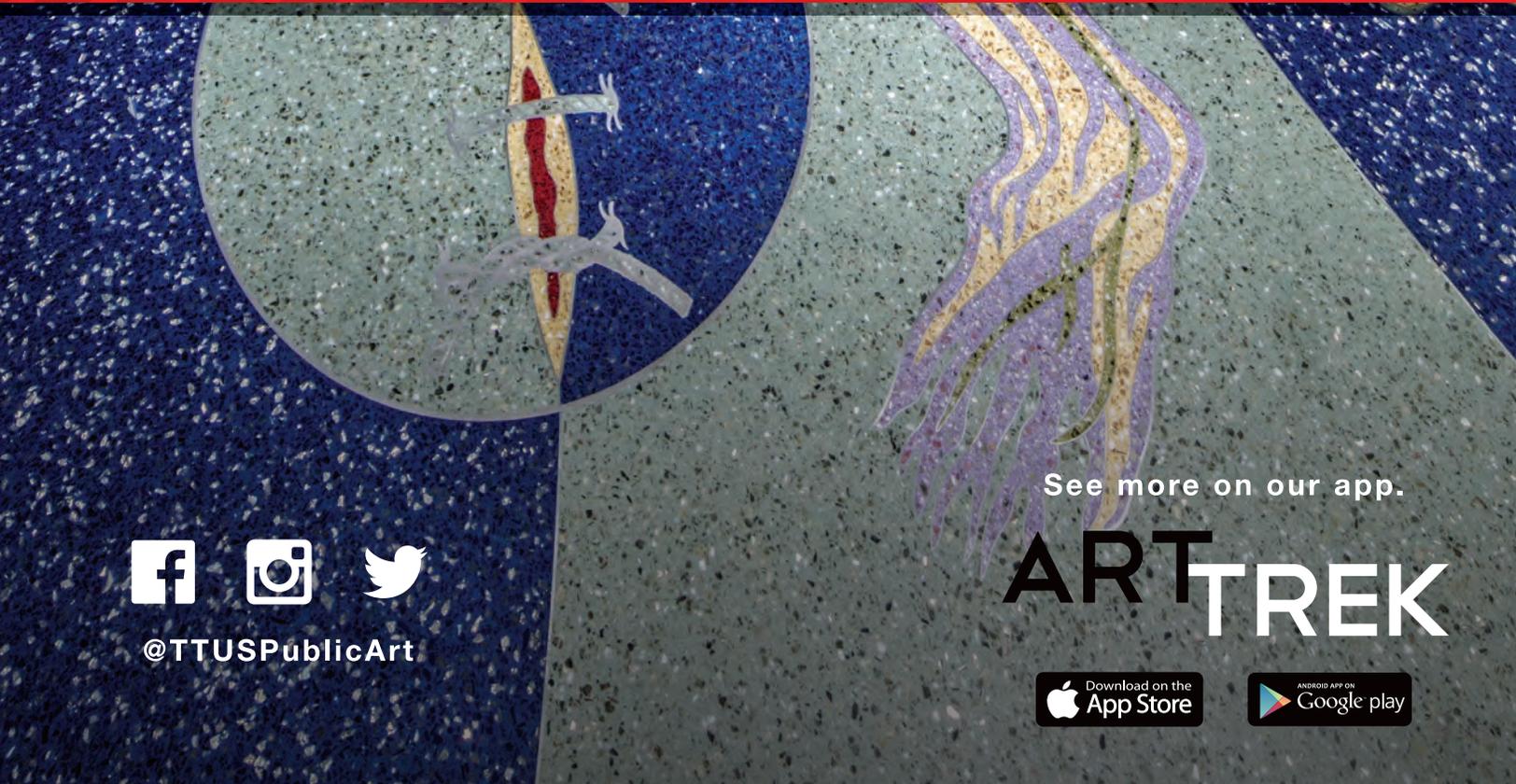
WILD RIDE!

Texas Tech won the go-round and gained a School of Medicine for West Texas. Fifty years later, TTUHSC celebrates how it's made a difference for the people of West Texas and beyond.

BODY GEOGRAPHY,
CAROLYN BRAAKSMA
& BRAD KASPARI
TTUHSC AMARILLO



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FEATURES

18 Game of Hearts

Taking a chance on a degree from a fledgling medical school resulted in a trailblazing career for H. Andrew Hansen, MD, and innovative care for West Texans.
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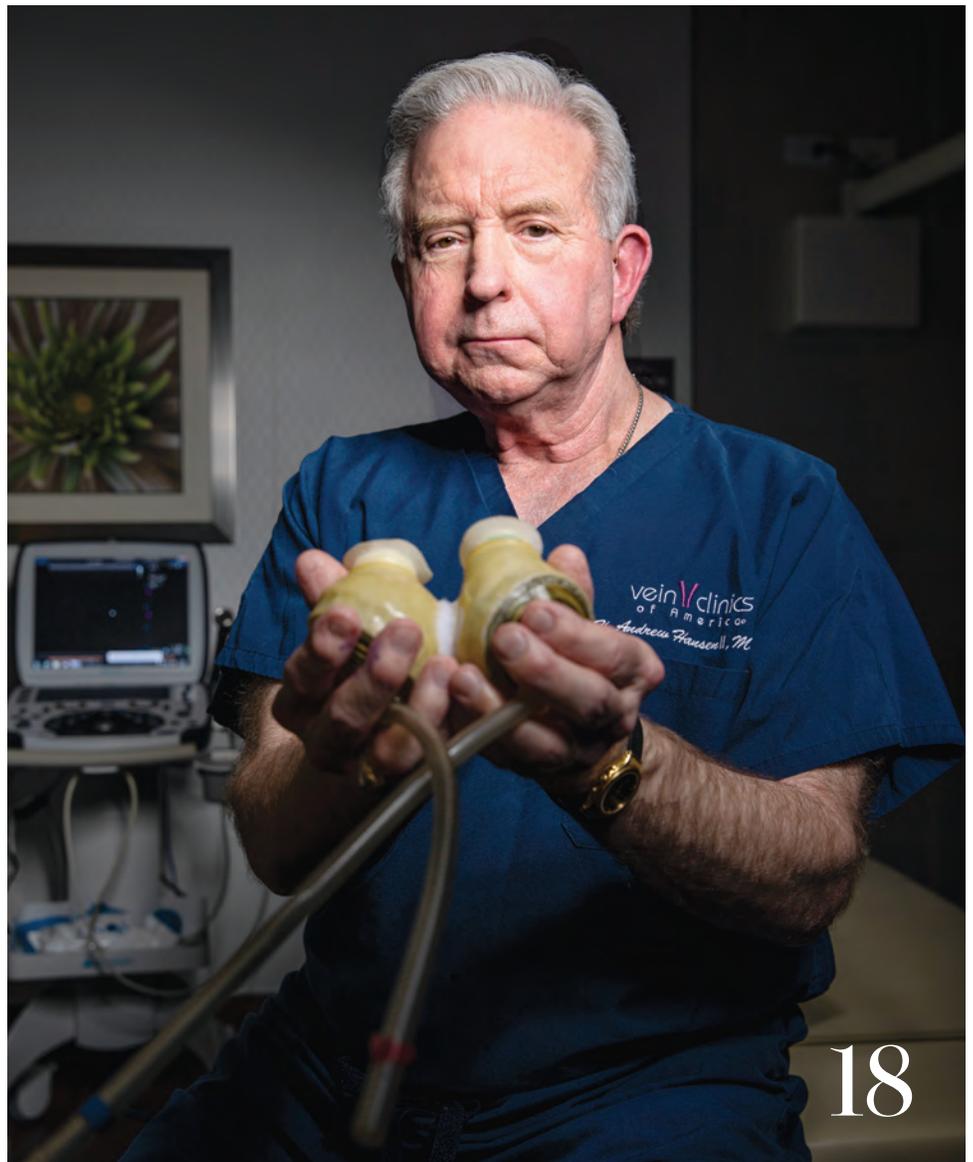
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Ruan Reast, FNP, MSN, recalls a crowning moment in her career.

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How do you show someone you care? For Ann Hagstrom, MSN, RN, it's with homemade cinnamon rolls.

FELIX SANCHEZ



IN EVERY ISSUE

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- 40 Check-Up**

ON THE COVER

TTUHSC was built on the pure grit and determination of individuals who saw a need for enhanced health care in West Texas. Today, we celebrate their efforts and look toward the future with great expectation.
Illustration by: István Szugyczyk



Tall tales, trophies and a win for West Texas

I love a good story. In fact, one of my favorites is about the beginnings of our medical school. I've shared it on several occasions this year as we're celebrating our 50th anniversary. It goes something like this ...

As House Bill 498 approached passage, there came about a little political bargaining between Gov. Preston Smith and Frank Erwin, then chairman of the University of Texas System Board of Regents, regarding the fate of a medical school in West Texas and one Erwin wanted in Houston.

Smith, putting the pressure on Erwin, suggested that UT would not get their medical school unless Texas Tech did, and then added a law school for Texas Tech to the stakes ... and that's how Texas Tech got a law school and medical school.

While it makes for a great story to tell, it's really more akin to a tall tale than the whole truth. Fact of the matter is, the law school seated its first class in 1967 — the year before Smith became governor — and graduated its first class in December 1969.

There are hundreds of these little nuggets woven into our university's history. Some factual, some embellished, but all of them from a personal perspective of what it took to get us where we are today — and the pride of serving West Texas.

These are the stories that should be shared loud and proud like wearing a western belt buckle. They are our trophies — evidence of the ride. Robert Brandes, a western buckle collector, writes, "Until recently, western buckles were considered by the general public only as utilitarian devices to help hold up a pair of pants. But they are much more than that.

"Can you imagine the stories they would tell if they could speak?"

I think they'd tell of the longest eight seconds that ever ticked off a clock. Experiencing the sun rise after an all-night drive to make the next go-round. The sound of a bone-crushing break from a misplaced step of a 1,500-pound bucking bull.

What about our trophies? A pair of red scrubs, a Double-T branded stethoscope, a white coat.

And the stories they tell?

Compassionate care at the bedside. Millions of lives saved from a novel therapy. Access to health care where there was previously none — and a win for West Texas!

Tedd L. Mitchell, MD

PRESIDENT

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

“

There are hundreds of these little nuggets woven into our university's history. Some factual, some embellished, but all of them from a personal perspective of what it took to get us where we are today — and the pride of serving West Texas.

”

Feedback

EDITOR'S NOTE

Vonda K. Somerville, first editor of *Pulse* wrote the following in the magazine's inaugural issue:

"Edith Wharton (American author who was the first woman to win the Pulitzer Prize for Literature in 1921) said, 'There are two ways of spreading light: to be the candle or the mirror that reflects it.' There are many candles still burning brightly here, and there are now over a thousand reflections of that light out there somewhere. We hope this magazine will add to the glow."

We echo this sentiment 32 years later! With this issue, we're introducing a new design for *Pulse*. Our goal is for the magazine to better reflect the university's persona: a place where being a leader in health education, research and patient care ranks second only to the relationships built among those in its community who work, teach, learn and serve.

So, how'd we do? Each issue, we want to know if we hit the mark or fell short of your expectations. Drop us a note, and we'll share your feedback here in our new "Letters" section. Email your comments to pulse@ttuhsc.edu.

We hope you enjoy the new look and content of *Pulse*.

— Danette Baker, MA

EDITOR, *PULSE*
OFFICE OF INSTITUTIONAL ADVANCEMENT

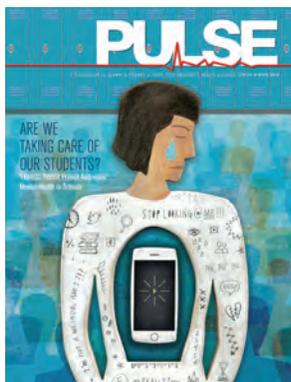
FROM THE ARCHIVES: UNCHANGED PHILOSOPHY

"We at the Texas Tech University Health Sciences Center take pride in many things, but you, our graduates, always stand at the top of our brag list. After all, quality health care comes down to one thing — people. Modern equipment may make our jobs easier and fine facilities may make our work more pleasant, but machines lack compassion and buildings lack minds. It is our health care team, from student to professor, from staff to faculty, whose skills and compassion impact the quality of patient care."

— Bernhard Mitemeyer, MD

TTUHSC EXECUTIVE VICE PRESIDENT AND
PROFESSOR OF UROLOGY

Excerpt from the Winter 1987 issue of *Prologue*, the first issue of TTUHSC's magazine, which was renamed *Pulse* in the next issue.



SUPPORTING STUDENT MENTAL HEALTH

"I am a TTUHSC-SON graduate from December 2006, now working in Houston, Texas. The Winter 2019 *Pulse* magazine came at a very interesting time for my family as we deal with a teen who is navigating not only junior high but also mental health struggles. I really loved three of the articles:

- Facing the Fight
- Smartphone Use Likely Contributes to Behavioral Health Issues
- "Z" is for Stress

Could you send an electronic copy so that I could share with our schools here in Conroe ISD? I would really like to work with the local schools to put together a more comprehensive plan to support our students, and these articles really articulated some of my thoughts and concerns, as well as give me a starting point.

Thanks in advance for your help!"

— Courtney Holwerda, BSN, RN

(NURSING '06)

EDITOR: Thank you for your feedback, Courtney! The current issue of *Pulse*, as well as archives, is available online at: ttuhsc.edu/alumni/pulse. We hope these stories help you work with the schools in Conroe!

Pulse

THE MAGAZINE OF TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

Vol. 29, Number 2

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News + Views from TTUHSC

Scope

- + QUICK DOSE
- + THIS AND THAT
- + FACULTY PROFILE
- + FOR THE RECORD

Campus Heartbeat

*Lub dub. Lub dub. Lub dub. Lub dub.
Lub dub. Lub dub ...*

The digital art piece, “Pulse,” accurately monitors activity inside the new University Center on the Lubbock campus. The artwork is part of the Texas Tech University System Public Art Program. “We wanted the artwork to be a literal part of the circulatory system of this building,” said artist Adam Frank. Sensors on the doors of the building communicate with the piece, signaling the heart to beat faster based on the number of people inside.

ADAM FRANK



“

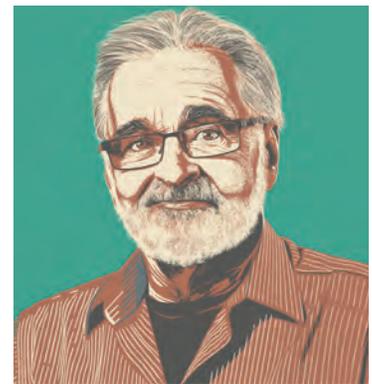
(People) born in the late 1950s or early 1960s should check with their doctor to see if they need another measles vaccine to be absolutely sure they're protected.

”

— RICHARD LAMPE, MD
DEPARTMENT CHAIR, PEDIATRICS
in a Q&A segment on the Lubbock NBC news affiliate's Facebook page.

Then/Now

Founding faculty member, **John Pelley, PhD**, needed a job to provide for his family. He moved in 1971 from Tampa, Florida, to Lubbock and became part of the new School of Medicine. He's served in many roles over the years and was heavily involved in the initial development of the medical school's curriculum. Pelley is a professor in the Department of Medical Education.



VA ILLUSTRATION: DANIEL HERTZBERG; PORTRAIT ILLUSTRATION: IVAN CANU CC: COPYRIGHT 2019

VA Clinic 2.0

THE NEED: More than 30,000 veterans in Lubbock and its bordering counties.

THE PROBLEM: Currently located off Interstate 27 and 66th Street, the Lubbock VA Clinic's lack of space combined with the inconvenient location makes it a challenge to access. Veterans often drive to Amarillo or Albuquerque for treatment due to lack of services offered.

THE RESOLUTION: A team of retired generals — Lt. Gen. Bernhard Mitemeyer, Maj. Gen. Walter Huffman, Maj. Gen. Edgar Murphy and Brig. Gen. Gary Harber — have made it their mission to provide better facilities and care to West Texas veterans with a new VA super clinic. Located across the street from

TTUHSC and the UMC Health System provides a strategic partnership bringing specialty and social services.

THE IMPACT: More veterans will have access to care and more physicians and TTUHSC students will be trained in treating veterans' medical issues.

“It's so important that we take care of the men and women who are willing to serve this nation; and TTUHSC wants to be an institution that serves our veterans,” said Mitemeyer, chair emeritus for the TTUHSC School of Medicine Department of Urology and longtime university administrator. The VA super clinic is scheduled to open in 2020.

Sherry Sancibrian, MS, CCC-SLP

(Health Professions '78)

*Interim chair of the School of Health Professions
Department of Speech, Language and Hearing Sciences
and program director of speech-language pathology*

Q: How long have you worked for TTUHSC?

A: This is my 35th year – I came to work for TTUHSC in May 1984. I actually had Melinda Corwin, PhD, CCC-SLP, (Health Professions '89, '87) as a student, and now she's been the director of our Stroke and Aphasia Recovery (StAR) Program and a professor in the department for more than 20 years!

Q: Tell me about your workday.

A: I came to work this morning at 7:30 a.m. and entered grades and reviewed the admission report. After that, I met with a student, I'm having this interview with you currently (interview took place in May), and then I'm meeting with the dean of the School of Health Professions at 10:30 a.m. Another meeting at 11 a.m. concerning grading for clinical practicums, followed by a 30-minute break. At 1 p.m. and 2 p.m., I have meetings with graduate clinicians for documentation/electronic health records. At 4 p.m., I have a meeting about departmental finances. Then I'm going to run copies of the final exam that I'm giving in the morning at 9 a.m. Normally I'm also teaching and working in the clinic, but since finals are in progress, my days in May often become catch-up days from the entire semester.

Q: How many courses do you typically teach?

A: I teach two to three courses per semester.

Q: Why Speech-Language Pathology?

A: I've technically been an SLP from an early age. I was the oldest of four siblings living on an Air Force base in Tripoli, Libya. My youngest sister had some speech and language problems, and since we lived on the base, someone came in to work with her once every six weeks from Germany and would leave home programs for her. I became in charge of her home program working with her on her speech, which led me to choosing this career at the early age of 14.

—By Kara Bishop



Stat! TTUHSC By the Numbers

TTUHSC HAS GRADUATED MORE THAN 28,000 HEALTH CARE PROFESSIONALS. OF THOSE, 24% REMAIN IN THE 108-COUNTY SERVICE AREA.

Tuition, fees and student indebtedness in the Graduate School of Biomedical Sciences is among the lowest in the state.



TTUHSC
now graduates
more
health care
professionals
than any
other
health care
institution
in Texas.

IN THE PAST
10
YEARS,
TTUHSC HAS
RECEIVED
ROUGHLY
\$225
MILLION IN
PRIVATE,
FEDERAL AND
STATE RESEARCH
DOLLARS.

The TTUHSC School of Medicine Family Medicine Accelerated Track was the first program of its kind in the country.



NEAL HINKLE

- + SCHOOL OF MEDICINE
- + SCHOOL OF NURSING
- + JERRY H. HODGE SCHOOL OF PHARMACY
- + SCHOOL OF HEALTH PROFESSIONS
- + GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Vitals

Signs from the Schools

21st Century Stethoscopes

In addition to a stethoscope around the neck, you may see a TTUHSC medical student pull an ultrasound machine out of their pocket to check a patient's vitals. In the future, you may see doctors swap out the stethoscope for the ultrasound technology permanently. In 2012, Jongyeol Kim, MD, professor in the departments of Neurology and Medical Education, wanted to enhance the medical education experience by bringing ultrasound technology to the School of Medicine.

This is the Vscan pocket-sized ultrasound from General Electric Co. The lower half of the device contains the buttons to control presets and menu settings. There are many things you can do with this device including triaging patients on the fly and even some procedures like amniocentesis.

The bottom transducer with the deep end is used for heart, abdominal and pelvic clinical applications.

The screen powers on as you flip the device open. There are multiple presets to choose from when scanning. To scan this image of a wrist, the cardiac preset was chosen. The scan revealed the nerves and muscles pictured on the screen.

This device is unique in that it has a dual probe with a transducer on the top and bottom. The top transducer with the shallow end is used for lung, leg and long bone clinical applications.





From Anxiety to Sweet Relief

Erin King sat at a table in the middle of the room among fellow medical students, families and friends at the McKenzie Market Alumni Center for Match Day 2019. She wasn't smiling. Even as Michelle Tarbox, MD, professor in the Department of Dermatology told silly jokes while calling out students' names to retrieve their match envelopes, King was stoic.

"What do you call a doctor who fixes websites?" Tarbox asked. "A URL-ologist!" The crowd tittered with nervous, distracted laughter. They were all anxiously awaiting 11:00 a.m. when they could open their envelopes and learn their destiny.

King just stared straight ahead while occasionally glancing at her phone. Finally, it is time to open the envelopes. King's hands shake as she struggles to open hers. She pulls out the card, glances at it and collapses in tears. She's been matched with her top choice of residency: University of Oklahoma College of Medicine in Pediatrics.

All at once, the pressure and adrenaline that's felt like a heavy weight on her shoulders releases and deflates like a balloon, and she celebrates with her friends.

Abigail Buckholz, fourth-year medical student, plays the ukelele in the MusiCare program — a TTUHSC student organization.



PHOTO: NEAL HINKLE; PORTRAIT: IVAN CANU CC: COPYRIGHT 2019

HEALTH WITH SOUL

Approximately 1/3 of TTUHSC medical students surveyed (276 total responses) — in a student study project conducted while taking the Patients, Physicians and Populations course — were involved in the arts prior to medical school. The results were uploaded on Mendeley, a data collection platform.

Recognitions

MILITARY DOCTORS DAY

Graduating students were recognized for their military commissions at a special ceremony in May. Lubbock Mayor Dan Pope proclaimed the day as “Military Doctors Day.”

TOP FMAT RANKING

The American Academy of Family Physicians ranked TTUHSC School of Medicine in the top eight of allopathic schools that provide long-term contributions to the family medicine workforce. TTUHSC also was listed in the top 20th percentile nationally by the Accreditation Council for Graduate Medical Education for total graduates entering accredited family medicine residency programs over the last seven years.

NOD TO BARBERSHOP BLOOD PRESSURE GROUP

The group was honored with a “Headliner Award” from the Association for Women in Communications Lubbock Chapter in recognition of its education efforts about high blood pressure.

HIGH RANKING IN DIVERSITY

Diverse Issues in Higher Education ranked TTUHSC School of Medicine eighth in the nation for its number of health degrees obtained by minorities. Data for the ranking comes from the Completion Survey of the Integrated Postsecondary Education Data System collected by the U.S. Department of Education.

PROFESSOR RECEIVES GRANT

Rakhshanda Rahman, MD, professor of surgery, has been awarded a \$2.4 million grant from the Cancer Prevention and Research Institute of Texas. The funding will enable Rahman and her team to detect cancers at earlier stages, increasing successful treatment options.

Medical students Anthony Betteridge and Nathan Lloyd model their new virtual reality device for studying.



Out of the Books and Into the Video Game

Anthony Betteridge and Nathan Lloyd sit through another lecture; the curriculum material is intense as disease after disease with symptom after symptom is listed off in rapid fire by a professor desperately trying to cover all the material before time expires.

“There has to be a better way to do this,” Lloyd says as he glances at his watch. A middle-school science teacher for years, Lloyd is used to developing curriculum materials and new ways for students to learn. “What if there was a way for us to see all these diseases and symptoms before taking the board exam?” Betteridge responds. A U.S. Air Force pilot from Tacoma, Washington, Betteridge enjoys thinking outside the box.

He partners with Lloyd — both of whom are third-year medical students — to develop a new way to study: virtual reality medicine, or VxMED.

After mentioning their idea to a fellow

student in the library, they were steered toward the TTU Innovation Hub at Research Park. “We walked across the street and all of a sudden, we had a plan,” Betteridge recalled.

The students prepared hard for the iLaunch competition, where the Innovation Hub grants prize money for the best “next big idea.” VxMED won first place and \$10,000, which went toward the prototype. Designed with a 3D virtual gaming software, VxMED puts you in the room with a patient exhibiting symptoms.

“I think the immersive experience can make you more prepared for exams than just memorizing text from textbooks,” Lloyd said. “Maybe you’re not a ‘good test taker,’ but you could be with a different approach to studying.”

Interested in investing or participating in VxMED? Email Anthony Betteridge at anthony.betteridge@ttuhsc.edu or Nathan Lloyd at nathan.lloyd@ttuhsc.edu for more information.

Take a Break, Pet a Dog

Walk into the TTUHSC at Abilene School of Nursing foyer during the lunch hour, and you might get mauled – by a puppy. Pet therapy dogs from Hendrick Rehabilitation Center are on campus before midterm and final exams for students to pet and cuddle to alleviate stress.

Third-year nursing student, Mary Nguyen, skips into the foyer excited to see her dog pals. “I’ve really bonded with all the dogs that visit,” she said. “I have always supported animal therapy because of its great antidote of stress. This program is one of the best brain breaks you can get, and I never miss a meeting!”

“

Scientific studies indicate animals can greatly enhance a student’s mood, and help them center and refocus before resuming their studies... Bringing a little bit of home to campus is one of my favorite things about our Study PAWS (Pet Away Worries and Stress) program.

”

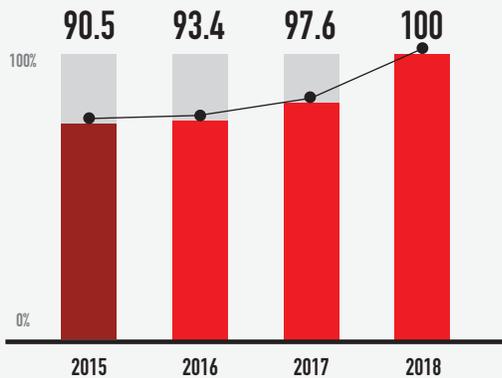
— PEARL MERRITT, EDD, MSN
DEAN, SCHOOL OF NURSING AT ABILENE



ISTOCK BY BETTY IMAGES

PERCENT FIRST-TIME PASS RATE

CLG: New curriculum implemented in Level 1 Fall 2015 semester



Pass Rates Climb with Curriculum Leadership Group

After adopting the Curriculum Leadership Group in 2015, TTUHSC School of Nursing NCLEX pass rates dramatically increased — achieving a 100% pass rate in December 2018. The Curriculum Leadership Group is unique to the School of Nursing and is an innovative approach to increasing test scores by interweaving testing concepts throughout all four levels of the Traditional BSN program curriculum.

9,818

PATIENTS WERE SERVED IN 2018 THROUGH TTUHSC'S NURSE-LED CLINICS.

IVAN CANU CC: COPYRIGHT 2019

Q&A with DNP Students

To learn more about the new BSN to DNP program, *Pulse* sat down with two of its students.



Jennefer Jordan, first year in the BSN to Family Nurse Practitioner degree program.



Lori Kumar, first year in the BSN to Psychiatric Mental Health Nurse Practitioner degree program.

Why did you choose BSN to DNP?

KUMAR: Texas Tech (University Health Sciences Center) was the first public university to offer this program. Private universities are very expensive, and as with many students, affordability is huge for me. In addition, the name of Texas Tech University Health Sciences Center carries great value.

Where do you see this program taking you?

JORDAN: I'd love to promote the Advanced Practice Registered Nurse role with legislation. I have a bachelor's degree in political science, so I'd like to combine those degrees to help advance the role of the APRN, as well as develop a successful family practice.

What has been the best lesson you've learned in this first year?

KUMAR: It's important to have a great team and be passionate about what you're doing. Those of us in the program right now are all across America in different time zones. We all have families and jobs and obligations. It's not been the easiest to set up schedules to communicate for projects and studying together, but it's so important. We hold each other up.

What's your advice to others considering this education option?

JORDAN: Roll with the punches, be flexible and open to change, and collaborate with your peers who will support you.



Kappa Psi member Brandi Corpier pictured with pageant winner, Vu Bui.

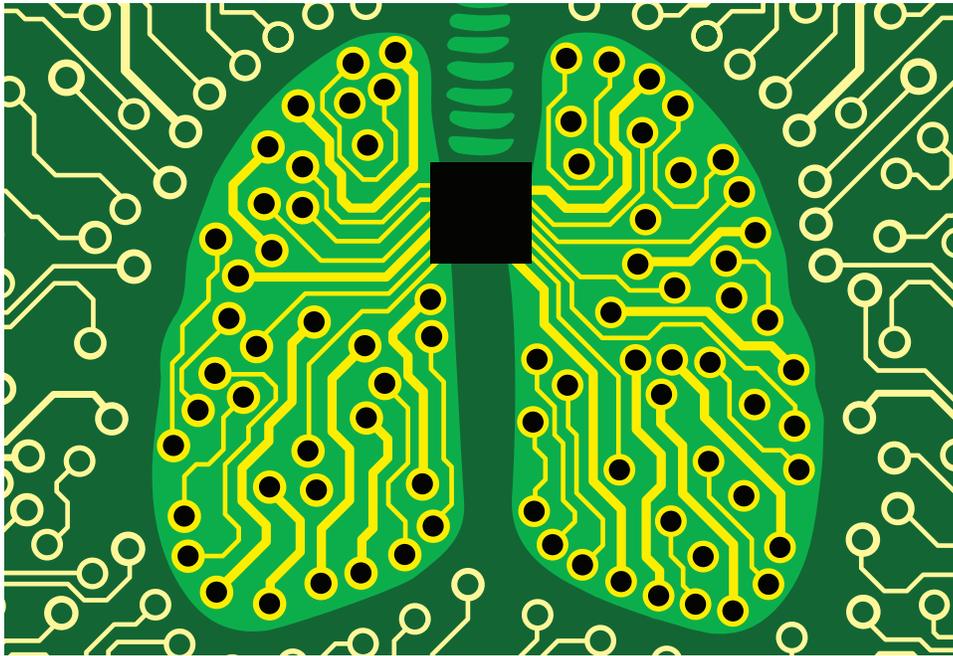
Pharmacy King

Vu Bui, a third-year student studying to become an ambulatory care pharmacist, takes home the Mr. Pharmacy Pageant trophy. Kappa Psi Pharmaceutical Fraternity – Delta Pi chapter – hosts the annual pageant in Amarillo as a charity event. Proceeds benefit the College Success Initiative, a nonprofit organization in Amarillo that promotes post-secondary education for high school students and prepares them to succeed.

“
What made this event so special was that I was performing with the people I care about the most, my fellow pharmacy family – or ‘pharmily’ as I call them.

– VU BUI
THIRD-YEAR PHARMACY STUDENT

PROVIDED BY KAPPA PSI PHARMACEUTICAL FRATERNITY



ORGAN ON A CHIP

Fakhrul Ahsan, PhD, professor in the Department of Pharmaceutical Sciences at Amarillo, has developed a new, revolutionary concept for researching potential cures for pulmonary arterial hypertension (PAH). The concept is called “organ on a chip” for its ability to recapture organ level functions on a small chip-like device.

WHAT IS IT?

Organ on a chip is a multilayer device, which provides an environment to grow cells that undergo changes when an individual develops PAH. This device can capture the pathophysiology of PAH, which helps researchers understand this rare disease that narrows the pulmonary arteries and arterioles carrying the blood from the heart to the lungs.

WHAT IS THE PUBLIC HEALTH RELEVANCE?

PAH affects between 10 to 52 people per million and causes 1.7

deaths per million. People of every age and race are subject to the disease. Women are four times more likely than men to be affected, but more men succumb to the disease than women. This device will allow researchers to better understand the processes implicated in the disease, expedite drug discovery and help develop personalized therapy based on an individual’s sex and age.

FUNDING?

In 2017, the Cardiovascular Medical Research and Education Fund awarded Ahsan an estimated \$163,000 over three years for device development. This year, Ahsan received a four-year \$2.4 million grant from the National Institutes of Health for further validation of the device.

FUTURE PLANS?

Modification of this device for studying other cardiopulmonary diseases is underway.

“ My dream is to establish a start-up company for fabrication and validation of such devices and supply them to the medical research community.

— FAKHRUL AHSAN, PHD
PROFESSOR IN THE DEPARTMENT OF
PHARMACEUTICAL SCIENCES

IN THE 2018 CALENDAR YEAR,
THE JERRY H. HODGE SCHOOL OF
PHARMACY RECEIVED MORE THAN

\$9 MILLION

IN FEDERAL RESEARCH FUNDING.



DRY NEEDLING ALLEVIATES MUSCLE PAIN

It's possible to find pain relief by inserting a fine needle into the muscle. Gary Kearns, PT, ScD, assistant professor in the Doctor of Physical Therapy program, said inserting the needle increases blood flow to the muscle and relaxes it, which usually results in pain relief. It can also stimulate muscles that aren't firing optimally.

Kearns likes to emphasize to patients and PT students the need for a thorough assessment to determine if dry needling is the right approach. It can be great for the right person, but existing conditions need to be vetted before applying this therapy.

COMMON CONCERNS:

- Fear of needles
- Infection
- Pregnancy
- Blood thinners
- Compromised immune system

POTENTIAL SIDE EFFECTS:

- Bruising
- Soreness

A NATIONAL CHAMPIONSHIP EXPERIENCE

“The entire experience was surreal. I started my clinical rotation with the Texas Tech men’s basketball team mid-season, and they had just lost their third game in a row. After that, it was nonstop winning, with the exception of the Big 12 Tournament loss to Iowa State, so maybe I was their good luck charm? This team was special and this was an incredible experience to be a part of. And, to think, I originally didn’t even have basketball down as one of my clinical choices!”

— THEO BELHOMME
STUDENT, MASTER OF ATHLETIC TRAINING

Theo Belhomme traveled with the team to the NCAA National Championship tournament for clinical credit.

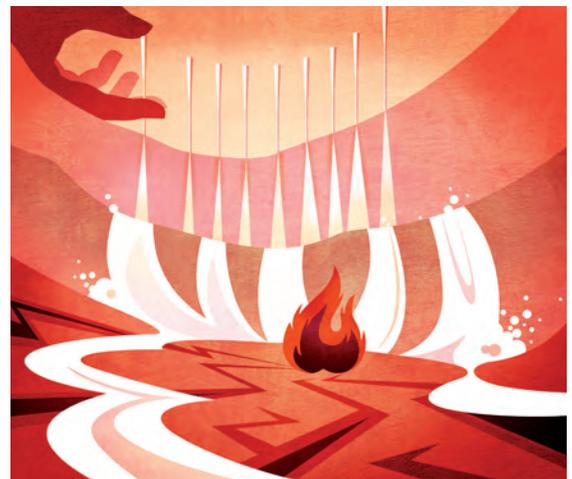


PHOTO: NORVELLE KENNEDY/TEXAS TECH ATHLETICS; ILLUSTRATION: DARIA KIRPACH. CC. COPYRIGHT 2019

I Hate Cancer

My name is Riccay Elizondo, and I hate cancer.

Cancer took my cousin, who was basically my brother, at age 17. Several family members have battled cancer; some have won, others have lost. Growing up, I wanted to help people in any way possible, but it wasn't until my senior year of college that I knew exactly how — scientific research. Immunology is a fascinating field with promising potential to be the cure we need. Exploring cancer in the field of immunology is where I plan to focus for the foreseeable future. I'm a fourth-year PhD candidate in the lab of Robert Bright, PhD, professor of immunology in the Graduate School of Biomedical Sciences, and I think there's a way to use the immune system to fight cancer. I'm confident I will find it!



KAMI HUNT

31ST ANNUAL STUDENT RESEARCH WEEK

The Department of Immunology and Molecular Microbiology hosted the 2019 Student Research Week in March. The theme: "Animalcules Detected: Immune Response Activated." Here's the facts:

261

poster presentations

187

people attended the banquet

7

of the 104 students who applied were selected as speakers

64

students opted in for additional judgment of their entry by a Lubbock Economic Development Alliance representative

34

silent auction items raised \$1,620 for scholarships

\$3.5K

donated for scholarships

90

volunteers

GAMIE *of* HEARTS

Renowned, trailblazing, cardiovascular surgeon and inaugural School of Medicine class member, H. Andrew Hansen, MD, embarks on a lifelong quest of the heart.



By KARA BISHOP
Photography by FELIX SANCHEZ



H. Andrew Hansen, MD
(Medicine '75), holds
a model of the Jarvik 7
that he keeps in his office.

In a cramped surgical debrief room at Lubbock's Methodist Hospital, three doctors huddle in an ardent discussion. An hour before, a 65-year-old man had been rushed into the emergency room in cardiac arrest. Cardiologist Howard Hurd, MD, called in the cardiovascular surgeon, H. Andrew Hansen, MD, (Medicine '75). They wheeled the man immediately into surgery for a coronary artery bypass. Now, lying in the intensive care unit, hooked to multiple IVs, a ventilator tube and an intra-aortic balloon pump, the patient still wasn't responding. The heart team at the third busiest heart program in Texas needed to decide how to proceed — and quickly.

Hansen, Hurd and Guy Wells, MD, cardiologist and third doctor on the heart team, knew they were taking a risk. This would be the first implant in Texas of the Jarvik Acute Ventricular Assist Device (AVAD). They also knew it was the only chance they had to save the patient's life.

The Jarvik AVAD, or Jarvik 7, named after its inventor, Robert Jarvik, MD, was the first successful artificial heart. A pump-style device with valves and a polyurethane bladder inside. Air pumps in and out of the bladder through tubes that are attached to an appliance — similar in size and appearance to a washing machine — powering the device to move up and down. When attached to the side of the heart, the up and down motion pushes blood through, giving the human organ time to rest and recuperate. Once rejuvenated, the human heart takes back over allowing the physicians to disconnect the patient from the Jarvik heart.

Twice in 1987, Methodist Hospital administration flew their entire heart team — doctors, nurses, staff members — to the Jarvik program's training center in Salt Lake City, Utah, to learn about the Jarvik 7 and train on the procedure. At the time, the team was performing more than 1,200 heart surgeries a year, giving them special clearance from the Food and Drug Administration to work with this new technology. At the training center, Hansen executed the procedure twice in calves — the best model at the time for training on heart implantations. Every person on the heart team understood their role in the implantation procedure by the time they flew back home. Jarvik, along with the head veterinarian and head engineer of the Jarvik program, also flew to Lubbock once to visit the hospital and make sure everything was in order. The Methodist Hospital heart team was prepared to use the Jarvik 7 if needed. Turns out, their first case was just months away.

Hansen moved back to Lubbock in 1981 to join both Methodist and St. Mary's heart programs after a four-year general surgery residency at Baylor College of Medicine and a two-year cardiovascular residency at Emory College of Medicine. Both schools had renowned heart programs, but working under Michael DeBakey, MD, — a world-renowned cardiovascular surgeon — at Baylor was a coveted position.

The innovations Hansen witnessed from working with DeBakey, in addition to a problem-solving personality inherited from his father, would motivate him to pursue the Jarvik 7 procedure full throttle. He'd spent his whole life waiting for this

moment. A moment where he had the answer to the problem. The difference in this procedure and his training consisted of a human subject and, unlike the calf, this operation wouldn't require three feet of breathing tube. The heart had the same number of chambers. And the heart is what mattered.

Hansen, Hurd and Wells agreed. This was the Jarvik 7 case. Hansen walks down the hall to the operating room. "I'm ready. We've all trained for this to ensure the safest method possible. This man is counting on me. The heart program is counting on me." Not only was this implantation the first in Texas, but less than 10 had been performed worldwide.

The hallway seems endless, and for Hansen, that's OK. It gives him time to mentally rehearse the procedure. Make the incision in the chest over the heart. Pull back breastbone and tissue. Clamp. Carefully insert the Jarvik 7 into the chest cavity and attach it to the left ventricle of the heart. Partially close chest. Connect tubing to the machine.

“I'm ready. We've all trained for this to ensure the safest method possible. This man is counting on me.”



— H. ANDREW HANSEN, MD

Two hours later and everything went exactly as expected — almost too easily. The patient lies peacefully on the exam table while the pump and device work in perfect harmony replacing the body's most vital organ. The waiting game begins.

Hansen never actually planned to be in an operating room. As a young boy living in Port Arthur, Texas, he wanted to be an engineer like his dad. "Son, you don't like to get your hands dirty," his dad told him one day while they were discussing his future. "You need to be a body engineer." Surgery wasn't exactly clean, but doctors wore gloves and washed their hands often, so Hansen chose medicine.

He was one of those kids always asking "Why?" about everything to anyone who might have the answer. He had an unending curiosity for how things worked. And he loved a job well-done. When mowing his parents' yard, Hansen would look back at those straight, clean-cut lines with a sense of satisfaction — feelings he would later experience after finishing a surgery. Neatly woven sutures marked the completion of a successful procedure that drastically improved a person's life.

Of course, surgery meant medical school. Working toward his



H. Andrew Hansen is currently the “vein disease expert” at Vein Clinics of America — The Woodlands, Texas.

zoology degree as an undergrad at Texas A&M University, Hansen wanted to stay in his home state if he could, so his adviser told him to apply for every medical school in Texas. Hansen wasn't afraid of trying something new, including this fledgling medical school in Lubbock, Texas.

Texas Tech University School of Medicine was the first school to accept him, so he moved north in summer 1972. After checking into the Rodeway Inn on Fourth Street and University Avenue, he noticed a dark red, angry sky. He'd just come from the coast and didn't recall any hurricane warnings. Upon asking the manager, he got a knowing smile. “Oh, son, we're about to have us a good old dust storm!” Hansen had officially been welcomed to Lubbock.

He settled into Drane Hall for the next three years — medical school in the beginning went year-round. His tenure at the School of Medicine was more of an apprenticeship, with first-year medical students scrubbing in to assist the attendings with surgeries. There weren't manikins to practice on to perfect technique. There weren't any residents assisting surgeons and educating students. Everyone was on the ground floor. The first surgery he witnessed in Lubbock was an aortofemoral bypass (joining abdominal aorta and femoral arteries) performed by Robert “Bob” Salem, MD. Hansen wasn't a stranger to operations, having worked as a scrub tech during his undergrad, so he knew good surgery when he saw it. And he saw it in Lubbock. He wasn't sure what to expect but was impressed by the speed and efficiency of the doctors. Quick, bam-bam-bam, vitals never dropping, nurses and staff never missing a beat while they assisted the surgeons. The recovery for the patient was as good as you could ask for.

Hansen juggled studying, lectures, surgeries and clinicals with

“recreational breaks” that involved pickup softball and football games out on the dormitory front lawn. Even the professors often approachable on a first-name basis — though Hansen wasn't comfortable with it — would join in. “Dr. Lutherer loved to get in there and play with us,” Hansen said. “He was pretty good!”

With the high-paced surgical aspect of his education, lectures didn't generate as much excitement for Hansen, especially biochemistry. That's what he thought, anyway, until he met biochemistry professor John Pelley, PhD. The founding faculty member, who still teaches in the School of Medicine Department of Medical Education, became his favorite teacher (and one, who, years later would flip through a binder in his office where he kept information about the first graduating class, see a photo and exclaim, “Oh, hey! There's Andy Hansen ... an amazing heart surgeon.”)

Everything Pelley presented made complete sense to Hansen, and he appreciated the fact that there weren't any curveballs on tests.

That wouldn't be the case in the real world of medicine where curve balls were more common than not. Which is why Hansen sat bedside, eyes alternating between patient and machine, hoping the Jarvik 7 would do its job.

The three doctors took shifts keeping vigil over the patient. Nothing could go wrong. Adrenaline raced through Hansen's body even off shift as he tried to relax in one of the empty hospital rooms, but his brain wouldn't shut down: Did you do everything correctly? Was there anything you could have done better? Is the

tubing attached correctly? What if he doesn't make it? And then self-reassurance in the dark stillness: Yes of course I did — machine wouldn't be working if I hadn't. Did the alarm just go off? No, it's working fine. It's working fine. It's working fine.

"We're not going to quit on this," Hurd said. It'd been a long, sleepless three days of observation so far.

"We should have done it sooner," Hansen said. He was frustrated. They'd been timid and should've put the pump in immediately when they realized they were out of options. Instead, they hesitated. Only briefly, but would a few minutes have made all the difference?

All three men stared at the machine — willing the heart it was pumping to heal.

Hansen never thought about just how far the Jarvik 7 would catapult his career. In 2000, Hansen performed a minimally invasive abdominal aneurysm — another first in Lubbock — with the novelty prompting him to invite Karin McCay, the local NBC news affiliate health reporter, into the operating room to film and cover the operation.

"Yeah, in retrospect, that probably wasn't the best idea," he said. "Something could've gone wrong." It didn't, and the patient, a teacher from Clovis, New Mexico, was able to travel back home the next day — a recovery that was not common practice at the time.

McCay and Hansen met again in 2006. This time for the first heart surgery in the region using the da Vinci Robot, a procedure Hansen pioneered. He had followed the robotic technology progression for a decade and was thrilled to add it to his arsenal when it became safe and FDA approved.

"Star Wars technology is bringing Dr. Hansen a new surgical partner ... da Vinci, a robot that can repair the beating heart, while the surgeon keeps his hands clean," McCay reported. "If you've ever tried to hitch up a trailer, you know the hardest part is lining up the big gooseneck until it fits right over the ball in the back of the pickup and locks into place. It's the same thing with the da Vinci robot, except you're lining up three big goosenecks."

When Hansen wasn't reading everything he could on robotic surgery, he was researching varicose vein treatment. Back in his Baylor days under DeBakey, varicose vein surgery was what Hansen coined "barbaric." The procedure was called "stripping." With the patient under a general anesthetic, the surgeon made two incisions — one each in the ankle and groin — threading a wire through the groin incision and out the ankle, ripping out the vein. All the vein branches that were previously marked before the procedure would then be cut out with sizable incisions.

"Patients looked like they had been in a knife fight and had to stay in the hospital for days with their legs wrapped in cast-like bandages (Elastoplast). We didn't even have good (compression) hose back then," Hansen said.

Eventually, DeBakey refused to do the surgery, sending people home — no easy task, as some of them had traveled from other countries — telling them to "just wear support hose." It bothered Hansen that medicine didn't have a better solution.

In 2005, technology caught up to the science, making the varicose vein removal operation an outpatient procedure lasting 15 to 20 minutes, generally scheduled during the patient's lunch hour, after which they would return to work.

Four years later, Hansen traded cardiovascular surgery for a full-time practice in vein disease. He had spent two decades taking chances, trailblazing, problem solving, and it had taken its toll on him. He was ready to slow down, work regular hours. Still blazing trails, just in a different direction.

"I wanted to be there for my family," said the father of five whose youngest will start college this fall at TTU — with plans to be a nurse. He'd spent most of their early years on call as an emergency heart surgeon.

"If we ever had the opportunity to attend an event or family outing, we had to take separate cars, because you never knew when Andy would be called into surgery," his wife, Kathy Hansen, said.

Hansen sits in his office at Vein Clinics of America in The Woodlands, thinking back on all the hills and valleys of an unending quest to figure out the "why" that defines his career.

"Oh, son, we're about to have us a good old dust storm!" Hansen had officially been welcomed to Lubbock.



He's taken stock of the cost of medical progress, of innovation, of advancement. It humbles him. And, perhaps that's why, on a shelf in his office, he displays a model of the Jarvik 7 that teleports him back to that day.

Thirty-two years ago, the trio stood in the intensive care unit in Methodist Hospital. Four days had passed. No patient response. Time expired. The machine was past its capability. What would eventually become the "bridge to transplantation" had failed today in its limited form.

"I hate to lose," Hansen says, defeated, as they unplugged the machine. Due to the novelty of the procedure and equipment, the FDA required pictures and removal of the Jarvik 7.

Scalpel in hand, Hansen prepares to open the patient's chest for the third time in one week. He removes the implanted device that worked so hard to save the human equivalent while his colleagues help him document the Jarvik 7's journey in Lubbock.

He had no way of knowing that the Jarvik 7 would eventually become the Jarvik 2000, a smaller device, powered by a battery, able to keep a patient alive until a transplant became available — a patient like the one on Hansen's table. 📍

WILD RIDE!

TTUHSC celebrates a rich 50-year history full of patient care, research and education.



'70s



1972

Texas Tech University School of Medicine formally opens in **Drane Hall** on the Texas Tech University campus with 36 freshmen and 25 junior students.

1979

The 66th Texas Legislature expands the university's original charter designating the institution as **Texas Tech University Health Sciences Center**.



1970



1969

The 61st Texas Legislature passes HB 498, signed by **Gov. Preston Smith** on May 27, creating the Texas Tech University School of Medicine.

1977

Gov. Dolph Briscoe signs landmark legislation — introduced by **Surendra K. Varma, MD**, and Sen. Kent Hance — mandating statewide hypothyroidism screening of newborns.



*Burdick
Cardiogram
Machine Mid-20th
Century American*

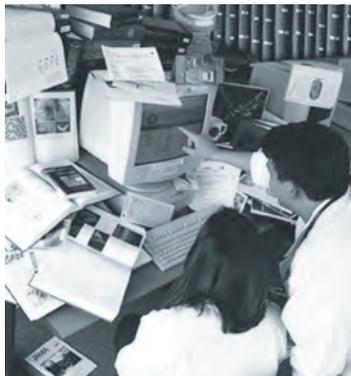


Photos provided by Texas Tech University Health Sciences Center; Buckle: István Szugyiczky

1988

The university holds its first **Student Research Week**.

Today, the student-led event attracts more than 200 entries, with representation from every school and multiple campuses.



1981

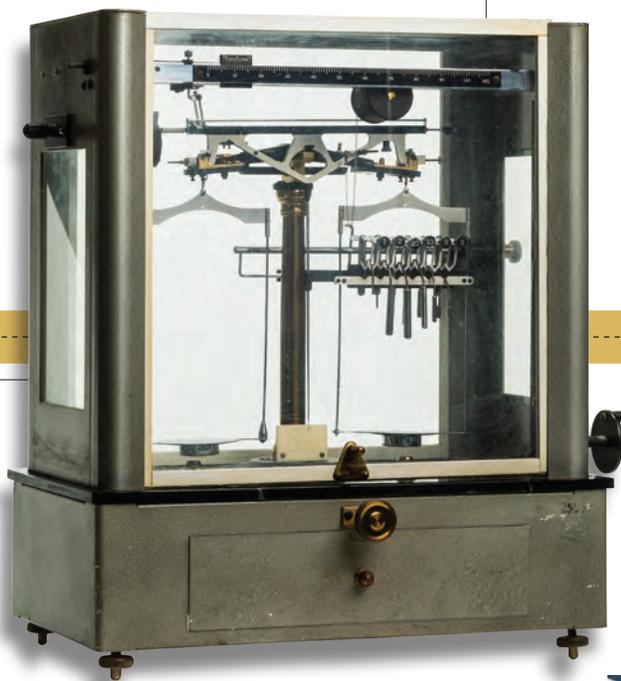
The **School of Allied Health Sciences** seats its first class, following approval by the 67th Texas Legislature. The school name officially changes to **School of Health Professions** in 2015.

'90s

1980

1990

'80s



Voland & Sons Analytical Balance Model 560-D ca. 1960.

1985

The **School of Nursing** expands to the Permian Basin. The 67th Texas Legislature approved a nursing school for the university in 1981 with the first class seated on Lubbock campus.



1991

The 72nd Texas Legislature establishes the **Graduate School of Biomedical Sciences** to coordinate graduate programs in the School of Medicine.



1995

TTUHSC receives its first U.S. patent, granted for an artificial blood substitute created by **Mario Feola, MD**, **Jan Simoni, DVN, PhD**, and **Peter C. Canizaro, MD**.



This Spencer microscope belonged to Dr. George Tyner, former Dean of the School of Medicine. On the back right leg, "Geo. Tyner" has been inscribed.

2010

F. Marie Hall SimLife Center opens on Lubbock campus and serves as a model for simulation training centers nationwide. Today, state-of-the-art simulation training is available at every TTUHSC campus.



2000

'00s



1996

School of Pharmacy seats its first class. The 73rd Texas Legislature created the school in 1993 based in Amarillo.

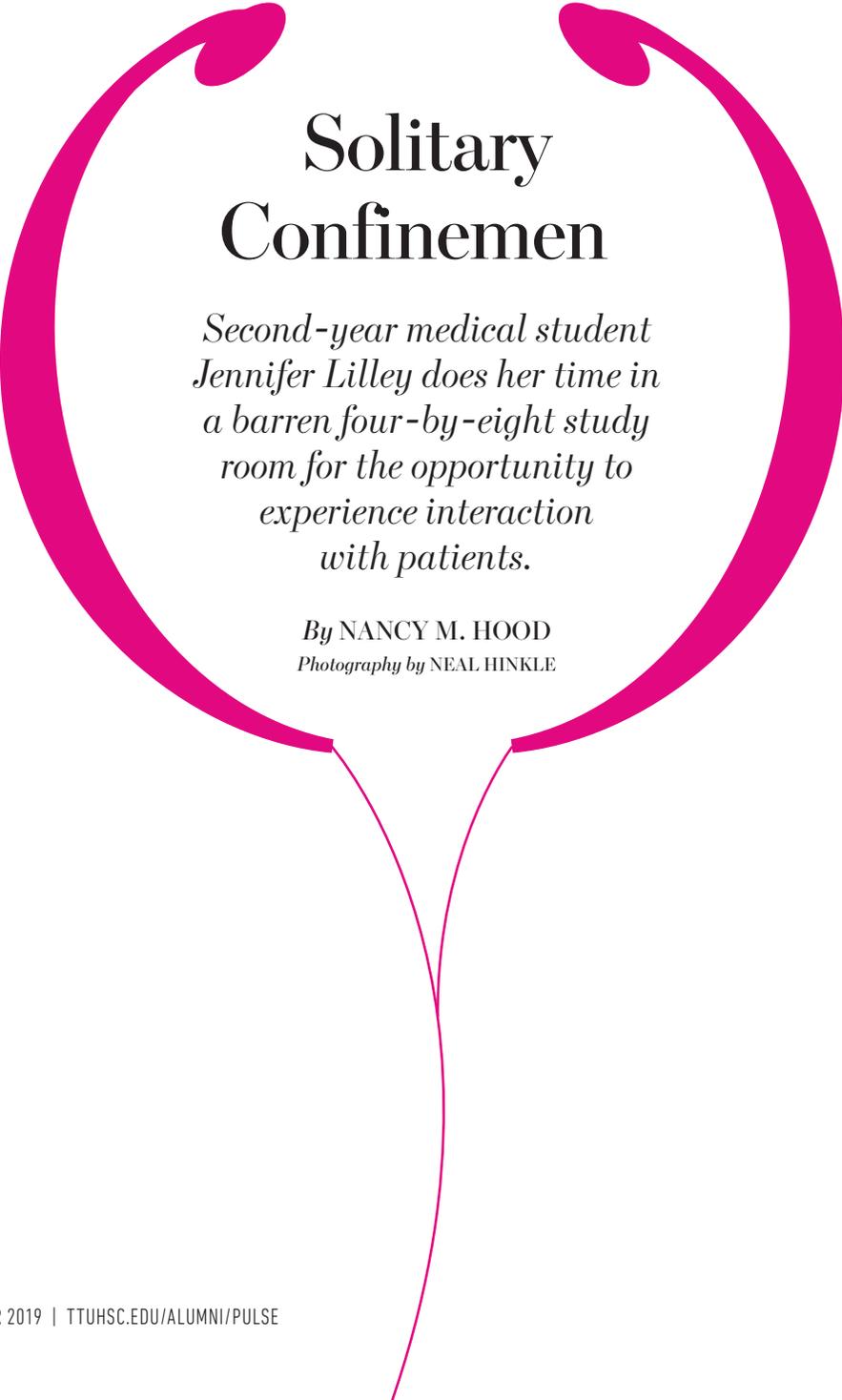
2007

TTUHSC Abilene campus opens with 40-member **School of Pharmacy** class. The campus now also houses nursing and biomedical sciences, including the public health program.



2015

School of Nursing becomes one of the first schools to offer academic credit for military medical experience with the addition of the **Veteran to Bachelor of Science in Nursing** program. 🎓



Solitary Confinemen

*Second-year medical student
Jennifer Lilley does her time in
a barren four-by-eight study
room for the opportunity to
experience interaction
with patients.*

By NANCY M. HOOD
Photography by NEAL HINKLE





S

itting across from me, Jennifer Lilley looks out from under thick lashes with deep blue eyes and casts a wry grin as she talks about her first board exam — the first of three required by the United States Medical Licensing Board. All medical students take Step 1 Board exams at the end of their second year, after they complete the courses that comprise their classroom foundation in the medical sciences. After passing the exam, they can advance into clinical practice in local hospitals to learn the practical side of healing.

Although Lilley decided she wanted to be a doctor early in life, she committed to the decision because of the love she felt for her grandmother. Lilley was 24 when her grandmother died. Like so many seniors today, she spent her final years in relative isolation. Her health kept her confined to home, and she rarely left, even to run errands. She had no real social network. Lilley believes that her grandmother's lack of stimulation, coupled with the isolation, accelerated her dementia.

As her grandmother's health was declining, Lilley was working on her master's degree in biochemistry. She was unable to spend the time with her grandmother that she would have liked, and that bothers her to this day.

"She died with my mom by her side in the hospital, but I couldn't be there, and it is one of my biggest regrets."

Lilley sits quietly for a minute, collecting her thoughts and sipping black coffee at a local Starbucks. Her experiences with her grandmother led to a first-hand view of how difficult end-of-life decisions and management can be for everyone supporting a loved one. She believes the health care profession

“What if we approached caring for older people with the same compassion and time we spend with children?”

— JENNIFER LILLEY
SECOND-YEAR MEDICAL STUDENT

will have to make significant changes to care for the largest population of citizens over 60 in U.S. history.

The senior population's isolation has increased now that families are not as geographically close, and, due to technological convenience, it's easier to shop online and have things delivered. Sometimes a doctor is the only person a single, aging adult might talk to or see in a week or a month, for some maybe even longer. This drives Lilley's passion to give more time to the elderly.

"What if we approached caring for older people with the same compassion and time we spend with children?" asked Lilley. "I don't know what it feels like to be in the last stage of my life, but I can imagine how frightening it must be. Every cough and ache has to be magnified, so maybe taking time to give a hug will make a difference."

The few years between her grandmother's death and the day she started medical school, gave Lilley time to think about the type of medicine she wants to practice — the kind of impact she

THINKING OUTSIDE THE SCOPE WITH THE TTUHSC TECHNOLOGY & MEDICINE CLUB

For Jennifer Lilley and her classmates, emerging medical technology is part of what makes the profession exciting. With clinicals still a year away, there is little chance for first- or second- year medical students to see new technology in action. This propelled four students to come together in their first year — 2016 — to see if they could get an introduction to innovative tools like surgical robotics and 3D printers. Lilley, along with Abi Buckholz, Max Schimelpfenig and Livingston Martin, knew that with all the resources available at TTUHSC, they just needed to ask for help — so they started a club.

"Livingston was the true ring leader," said Lilley. "He's a master organizer, and he doesn't take no for an answer. On more than one occasion, he has stood outside operating rooms and offices waiting for professors to come out to convince them to speak to the club. It usually works."

Since that time, the club membership has grown to roughly 30 members. Speakers this year presented on topics including "curing death," technologies that work at the cellular level to prevent aging; the da Vinci surgical robot; arthroscopic shoulder and knee simulations; electronic medical records; and cardiovascular imaging. Lilley said all of the presentations

covered existing technologies that the students might not get to see for another year or two, but she was most excited by a session on 3D printing.

"Kate Serralde who oversees the 3D printer in the HSC library let us work with the printer for a few hours. We had access to thousands of medical images that were in the library and were able to choose one to print," said Lilley. "I printed a model of a brain event, and the rendering let me see exactly how this injury looked inside the brain. Imagine the power of this technology to help doctors understand how things like dementia and stroke work or even to plan and practice before a complex surgery."



Jennifer Lilley uses a 3D printer in the Preston Smith Library's Methodology Lab to print out medical situations to study for her Step 1 Board exam.

wants to have on her patients. But first, in present day, she has to pass the exams.

The Conroe native checks her watch, already thinking about how many subjects she'll have to review by days' end in addition to her volunteer work. Always looking to step up her game, Lilley increases her medical knowledge by volunteering at The Free Clinic, providing care for patients without health insurance. Many of these patients further illustrate Lilley's philosophy that people need to know someone cares.

"I had (an older) lady come in to the clinic a few days ago who wanted to talk about her diabetes. She already knew what she needed to do to improve her health," said Lilley. "She just needed someone to talk to. She needed to feel safe for a few

minutes and wanted a little human contact."

Lilley checks her watch again, a signal that she really has to get back to her studies. She only has a few more days until the exam, and you can see the tension growing in her face as we talk. She has given as much time as she can afford right now. We stand and shake hands, but as she starts to walk away, she has another thought.

"You know, I think about my grandmother all the time. If she had been around people more, felt a little more affection and had something more to look forward to, she might have lived much longer. If that's the thing I take into a medical career that helps me be a better doctor, then I suppose that's a good thing to take away from losing her. I think she would be proud of that legacy." 📌



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- + HEALTH SCENE

Connecting with TTUHSC Alumni

Rounds

The First TTUHSC Nurses Cap

Ruan Reast, FNP, MSN, (Nursing '93, '84) holds her original nurses cap as a member of the School of Nursing's first Traditional BSN class. Teddy Langford Jones, PhD, FNP, dean, and Patricia Yoder-Wise, EdD, RN, associate dean, designed the caps to form a double T and had them made from West Texas cotton. "You don't create a culture without creating the trappings of culture," quipped Jones. "I believe they call it 'branding' now." The caps, which were fastened by multiple bobby pins, were only worn for one hour before falling off and given an early retirement. "I'm still honored to have been given one," Reast said.

NEAL HINKLE



Web + Watch Ruan Reast demonstrate the cap's design.

Alumni and Students Share Special Bond

Roughly 100 people sat in Room 100 of the Academic Classroom Building on Friday, June 8, 2019, as eight students on stage introduced themselves. One student, Sara Dogom, summed up what everyone in the room was feeling:

“Tech’s School of Medicine was my last interview, and after many interviews not satisfying the need in my heart, I was ecstatic when I realized that TTUHSC filled the void. This was where I was meant to be. It’s about the patient here. It’s about the student here.”

After that, the nostalgia floodgates opened for those in the audience — School of Medicine alumni. They had gathered for a school reunion in celebration of the university’s 50th anniversary.

One after another they shared their memories, often with much emotion.

Paul Nolan, MD, (Medicine ’86) struggled with biochemistry. “If you didn’t pass, you wouldn’t get the ‘MD’ next to your name. I didn’t know what I was going to do because I was outright flunking biochemistry. Dr. Dalley

(Bernall Dalley, associate professor in the Department of Cell Biology and Anatomy) set me up with a student mentor and that got me through. Hearing these current students’ stories today makes me so glad to see that same family spirit continuing on. I’m just so proud of this school.”

Stephen Walling, MD, (Medicine ’76): “I’m a member of the class of 1976, and I think it’s hard for students to imagine what things were like in those very early days. The first years of our medical school we didn’t have a developed faculty infrastructure at that time. And if it hadn’t been for the community physicians of Lubbock, Texas, this school would never have gotten off the ground. And the doctors that gave their time, their energy and made patients available to us were the real basis on which this school was founded. We owe them tremendous gratitude for the wonderful medical school we have here now.”

The past. The future. One community of people with a huge love for TTUHSC.



Stephen Walling, MD, (Medicine '76) and his wife, Sharon

TTUHSC ALUMNI ASSOCIATION UPDATE



3,139

CURRENT MEMBERS

187

LIFETIME MEMBERS



\$21,866

GIFTS OVER DUES



\$70,830

TOTAL MEMBERSHIP DUES

KAMI HUNT

TTUHSC Snapshots



CELEBRATION OF GENEROSITY

1 | Tedd L. Mitchell, MD, TTUHSC president, speaks at the 2019 Celebration of Generosity event in the Permian Basin. Events were held on all five campuses to thank and recognize donors for supporting the institution's research, education through scholarships, patient care, and community impact.

2019 BOSTON MARATHON

2 | LesLee Taylor, PhD, LAT, ATC, (third from left) associate professor and director of the Master of Athletic Training Program served as a member of the medical team at the 2019 Boston Marathon.

OUTER SPACE EXPERIMENT

3 | TTUHSC hosted students from Nimitz Middle School in Odessa, Texas, to conduct an experiment to provide solutions for cancer in space caused by radiation. The experiment was sent on to be conducted at the International Space Station since the students won a contest through the Student Spaceflight Experiments Program.

ALUMNI RECEPTIONS

4 | Alumni gathered at reunion events this summer. Receptions were held in Abilene, Amarillo, Lubbock, Dallas, Fort Worth and New Orleans as of press time.



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- + NEWS & NOTES
- + FRIENDS WE'LL MISS

Update

Catching Up With TTUHSC Alumni & Friends



Ann Hagstrom, MSN, RN
ASSISTANT PROFESSOR
TTUHSC School of Nursing, Lubbock, Texas
Nursing School Graduate: 1986 (first class)

LOVE IN THE SHAPE OF A CINNAMON ROLL

He came in nervous and clearly out of place as a college student walking toward the school nurse office at Cavazos Middle School in Lubbock. She watched him stand outside the door for a minute before he finally took a breath and walked in. She smiled at him waiting for him to speak. “I was wondering if you could help me?” he said. “I’m sick but I don’t like doctor offices, and school nurses are kind.”

And that was one of the most rewarding moments of her life as a nurse.

After 17 years of service in schools, Ann Hagstrom, MSN, RN, CNE, moved into a faculty position at TTUHSC in 2009 with a desire for serving others that continues today. Birthdays, new babies, life celebrations wouldn’t be complete for School of Nursing faculty without Hagstrom’s amazing cinnamon rolls — made completely from scratch with a sourdough starter that she maintains continually to prepare for the next batch. — *Kara Bishop*

NEAL HINKLE

+

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Lisa Gittner, PhD, adjunct professor in the Julia Jones Matthews Department of Public Health received a 2019 YWCA Women of Excellence award.

Monish Ram Makena, PhD, (17, '11) published his first journal review in BBA Molecular Basis of Disease (November 2018).

+

SCHOOL OF HEALTH PROFESSIONS

Sixtus Atabong, PA-C, (05, '02) won the Independent Book Publishers Association's Benjamin Franklin Gold Award of Excellence for his book, "My Father's Gift."

Amanda Ayars, AuD, (12, '08) joined Pennsylvania Ear Institute of Salus University as a staff audiologist.

Sherry Sancibrian, MS, CCC-SLP, (78) received the Hall of Fame award from the Texas Speech-Language-Hearing Association.

+

SCHOOL OF MEDICINE

Rachel Anderson, MD, (13) received the

Superior Healthplan 2018 Foster Care Center of Excellence Award.

Philip M. Brown, MD, (89) joined Dermavant Sciences as chief medical officer.

Emily Goulet, MD, (11) joined Dallas IVF as a fertility specialist.

Cynthia Jumper, MD, MPH, (91, '88) has been elected to the Texas Medical Association – Lone Star Caucus Board of Trustees.

Carolyn Moyers, DO, FACOG, (Resident '10) joined HerKare treatment center as a medical provider.

Patti Patterson, MD, MPH, (Resident '83) received the Superior Healthplan 2018 Foster Care Center of Excellence Award.

Bao Pham, MD, (09) joined the Washington Regional Fayetteville Family Clinic as a primary care physician.

Samuel Prien, PhD, professor in the School of Medicine, has been elected to the National Academy of Inventors inaugural class of senior members.

Jyothi Prabha, MD, (Resident '17) joined White River Health System as a specialist in internal medicine and sleep medicine.



Ann Shanley, MD

RETIRED PEDIATRICIAN

Kingsbury, Texas

Medicine Graduate: 1975 (first class)

MOMENTS IN MEDICINE

When Ann Shanley, MD, was chief resident at the former Brackenridge Hospital in Austin, she did a rotation at a Christian hospital in West Nigeria under the tutelage of her mentor, Maurice Hood, MD, a Lubbock pediatrician. "I learned more there in two months than I learned in a whole year in my residency because of what we were exposed to. There wasn't electricity, there wasn't a window, there wasn't air conditioning. When I got off the plane I thought I was the smartest thing in the world; when I got back on it, I knew I didn't know anything."

Shanley worked for decades to bring individual attention to the patients in her pediatric practice. When people asked her what she did for a living, she said she took care of parents with sick children – compassion and humility were the foundations upon which her practice was built. But her family was equally important. After marrying John Shanley in 2006, she retired, and they transitioned to ranch life outside of San Antonio, Texas.

"They say you're practicing medicine because your knowledge is constantly changing. When you start working outside and your environment is constantly changing, you have to be willing to adapt to changes in order to succeed." – *Glenys Young*

MATTHEW CHASE

“

I am very honored and humbled by this recognition, but this award is not mine alone as I have had countless students assist me with my work. I came up with the crazy ideas, and they made it work.

”

— SAMUEL PRIEN, PHD

PROFESSOR IN THE SCHOOL OF MEDICINE
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

+

Tibor Racz, MD,
(Resident '97) joined
OPTIMAL Pain and
Regenerative Medicine.

Annette Sobel, MD,
professor in the
Department of Medical
Education and adjunct
professor in the School
of Nursing and Graduate
School of Biomedical
Sciences, received a
YWCA 2019 Women of
Excellence award.

**Talmadge Trammell
(’01) and Sara
Trammell (’02)**
received the United Way
of Abilene Volunteer
Service Award.

SCHOOL OF NURSING

**Cathi Burkham, MSN,
RN, (’15)** received the
IBM Watson Health –
Health Hero Award, one
of 27 people in the world
chosen for the award.

**Katherine Early, MSN,
RN, (’12)** joined USMD
Hospital as chief
executive officer and
chief nursing officer.

**Michael Evans, PhD,
RN,** dean of the School
of Nursing, received
the American Nurses
Association Margretta
Madden Styles
President’s Award.

Lori Rice-Spearman, PhD

DEAN

TTUHSC School of Health Professions, Lubbock, Texas

*Health Professions Graduate: 1986 (first class, clinical lab sciences)***THE DEAN’S GUILTY PLEASURES**

FAVORITE SCIENCE GADGET: Microscope!

FAVORITE T.V. SHOW: “House” and “Grey’s Anatomy” (“It’s nothing like real medicine but still really fun to watch. Some of the cases they have to work on are just so bizarre and interesting.”)

FAVORITE HOBBY: “I don’t know that you can call it a hobby, but being ‘Lolly’ to my two grandbabies is the best!”

FAVORITE VOLUNTEER SERVICE PROJECT: High Point Village (“I teach a cooking class there every Monday night – it’s so much fun!”)

FAVORITE BOOK: “Can you say encyclopedia? I just recently got rid of my entire hard copy set. It was painful.”

WHAT DID YOU WANT TO BE WHEN YOU GREW UP?

I always knew I wanted to do something in science. My brother got a data chemistry set as a gift, and I immediately took it over.

It had a tiny microscope and a magnifying glass. I loved it.

I was constantly asking “why,” to my parents. I wanted to know how things worked!

— Kara Bishop



Robert Flores, DNP, MHA, ('05) joined Methodist LeBonheur Healthcare as chief nursing officer.

David Marshall, DNP, RN, ('13) joined Cedars-Sinai as senior vice president and chief nursing executive.

Ronda Mintz-Binder, DNP, RN, associate professor for the School of Nursing at Dallas, named one of the 2019 DFW Great 100 Nurses at the DFW Great 100 Nurses celebration event.

Tracey Page, DNP, RN, ('14, '07, '04) received the Visionary Leader Award from UT Health San Antonio.

Hailey Watson, FNP, RN, ('12) joined Liberty Hill Physicians Associates as the clinic's new nurse practitioner.

Jeff Watson, DNP, MSN, ('16, '10), assistant professor in the School of Nursing, Watson has been elected to the American Nurses Association board of directors.

“

Congratulations to Dr. Sobel and Dr. Gittner on this most deserving recognition from the YWCA. Each is widely respected in their disciplines and across both the Texas Tech and TTUHSC campuses.

”

— LAWRENCE SCHOVANEC, PHD
TEXAS TECH UNIVERSITY PRESIDENT



John B. McClellan, MS
DIRECTOR OF CORPORATE ACCOUNTS
Luminex Corporation, Austin, Texas
Biomedical Sciences Graduate: 1977 (first class)

DIFFERENT WORLDS

Footsteps slap the marble floors and the sound of voices echo off the stainless steel laboratory walls as the first students walk into the new Texas Tech University School of Medicine building in 1976. Among them: John B. McClellan, MS.

The Graduate School of Biomedical Sciences initially held classes on TTU's general academic campus in the chemistry building. For McClellan and his colleagues, part of being the first to move meant spending more than a few hours unpacking and connecting equipment.

In present day, McClellan serves as the director of corporate accounts for Luminex Corporation, which develops instrumentation in the molecular testing arena.

“Technology in the medical profession changes rapidly,” McClellan says. “By the time those students who are just entering medical school graduate, they will enter a different world with more complex needs and solutions than the one I started in 42 years ago.” — *Nancy M. Hood*

PHOTO PROVIDED BY JOHN B. MCCLELLAN

“

We have a passion to help foster children. We believe we can help stabilize them and their placements, so they don't bounce around the foster care system. Perhaps they get a forever home sooner.

”

— PATTI PATTERSON, MD, MPH, (RESIDENT '83)
PROFESSOR IN THE DEPARTMENT OF PEDIATRICS

+

**JERRY H. HODGE
SCHOOL OF PHARMACY**

Thaddeus Hellwig, PharmD, ('06) has been named a 2019 American Society of Hospital Pharmacists Fellow. He received the school's 2014 Distinguished Alumni award.

Leia Gaddis and *Princy John* placed first in the second-year clinical skills competition student category at the Texas Society of Health-System Pharmacists Annual Seminar.

+

FRIENDS WE'LL MISS

Brooke Thomas, PharmD, (Pharmacy '07) died April 17, 2019.

Jenna Welch, mother of Laura W. Bush and inspiration for the Laura W. Bush Institute for Women's Health, died May 10, 2019.

A memorial scholarship has been established by the parents of *Kevin Wyatt McMahon, PhD, (Biomedical Sciences '07).* McMahon was featured in the summer 2014 issue of *Pulse.* He died Sept. 13, 2018.



Jagruti Patel, PharmD

PHARMACIST

Walgreens, Bedford, Texas

Pharmacy School Graduate: 2000 (first class)

RESUME OF SERVICE

OBJECTIVE: “My mom taught me the importance of serving others. I became more dedicated to the passion after losing her. I do it all for her.”

SERVANT EXPERIENCE:

- Part-time pharmacist and full-time mom and wife.
- Married to Sachin Shah, PharmD, (Pharmacy '00) associate dean and professor in the School of Pharmacy at Dallas. They have two children, Rushil, 15, and Sarina, 12.
- Volunteers with her children's

schools and helps with their activities in band and orchestra, field trips and fundraisers. “And, you know, of course I have to keep up with Dr. Shah!”

CARETAKER FOR HUSBAND'S FAMILY:

- Chauffeurs in-laws to doctor's appointments and physical therapy.
- All of her husband's family migrated from India five years ago. “We actually had 18 people living with us at one point while they figured out homes and careers. I wanted everyone to be able to stay together.” — *Kara Bishop*

PHOTO PROVIDED BY JAGRUTI PATEL

Check-Up *For the Record*

HOW WELL DID YOU READ?

Take this quiz and send back to *Pulse* team (pulse@ttuhsc.edu) to be entered in a drawing for TTUHSC swag!

1 | What does Jennifer Lilley use to help her study for exams?

2 | What is VxMED and who created it?

3 | Who won the Mr. Pharmacy Pageant?

4 | Who is the interim chair of the School of Health Professions Department of Speech-Language and Hearing Sciences?

5 | How much research funding has TTUHSC received in the past 10 years?

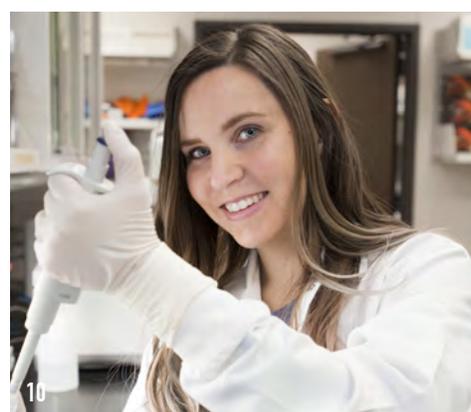
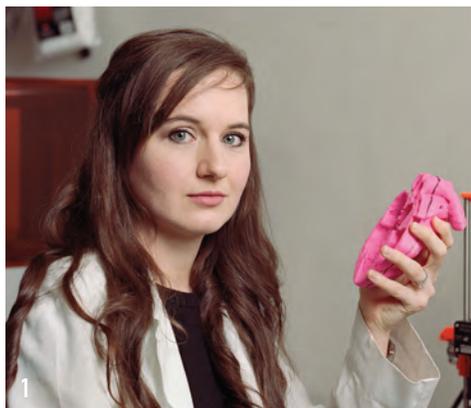
6 | What is predicted to replace stethoscopes in the future?

7 | Who just completed their first year in the BSN to Family Nurse Practitioner degree program?

8 | In what year did the School of Nursing implement the Curriculum Leadership Group?

9 | How many students who applied to Student Research Week were selected as speakers?

10 | Who is researching ways to fight cancer using the body's own immune system?



1. 3D printer, pages 26-29; 2. Virtual reality study tool invented by Anthony Betteridge and Nathan Lloyd, page 11; 3. Vu Bui, page 14; 4. Sherry Sanclrian, MS, CCC-SLP (Health Professions '78), page 7; 5. \$225 million in private, federal and state support, page 8; 6. Pocket ultrasound devices, page 9; 7. Jennifer Jordan, page 13; 8. 2015, page 13; 9. 7, page 17; 10. Riccay Elizondo, Biomedical Sciences student, page 17

ANSWERS



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Julia Jones Matthews
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+++
REVIVING
THE
Dream

BARBARA BERGIN, MD, (*Resident '86, Medicine '81*)
was shocked when she started enrolling her children
in college. She had completed a residency and graduated
from medical school and an undergraduate program
debt free — and tuition for medical school was \$500 per
semester. Enrolling her own children in college helped
Bergin understand why students who dreamed
of becoming doctors had opted out of medical school
altogether; it no longer seemed affordable.
So, she decided to help.

Web + Read Bergin's story online: yourlifeourpurpose.com