


NORTH TEXAS HEALTH & SCIENCE

2013, Issue 1

Magazine of the UNT Health Science Center



**She's got game
- again:
From patient to
state champion,
pg. 4**

**Dedicated to
creating healthier
communities, pg. 8**

**Keeping young
athletes going
strong, pg. 30**

**Physician's mission:
Being there when
lives need
saving, pg. 32**

MESSAGE FROM THE PRESIDENT

Unexplained upper-body pain left high school basketball star Kylie Ducat (on our cover) and the 12 physicians who'd tried to diagnose her condition confused and frustrated. But 13 turned out to be her lucky number. Thanks to UNT Health's Chief of Surgery Albert Yurvati, DO, (TCOM '86), she was soon shooting hoops again like the champ that she is. Read her story on page 4.



Likewise, UNT Health Science Center assistant professor (and UNT Health provider) Madge

Barnes, MD, found herself in the right place at the right time: check out the dramatic story of her timely intercession on page 32.

And speaking of right place, right time, consider physicians like UNT Health's Dan Clearfield, DO ('07), and Alan Stockard, DO ('76), who dedicate their time, energy and expertise to protecting "Friday Night Lights" student athletes.

By offering excellence in innovative interprofessional academics, research and patient care, we're making a difference in people's lives both locally and nationally. Check out our map on page 17 illustrating the geographic diversity of our graduates, and enjoy all the inspirational and informative stories you'll find in this and every issue of North Texas Health & Science.

We're justifiably proud of our positive impact and my thanks go to all our students, alumni, faculty and staff who work hard every day to help create solutions for healthier communities.

A handwritten signature in black ink, appearing to read "Scott B. Ransom, DO". The signature is fluid and cursive.

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On the cover

UNT Health's Albert Yurvati, DO,
and former patient Kylie Ducat.
Story on pg. 4.

LUCKY NUMBER 13



Albert Yurvati, DO, and Kylie Ducat

UNT Health physician, a TCOM graduate, helps high school basketball player regain her game

Albert Yurvati, DO ('86), was the 13th doctor to see 16-year-old Kylie Ducat.

For a year the high school basketball star had experienced pain in her chest that radiated to her back, neck and shoulders. At times she couldn't breathe. Playing basketball was out of the question. Her team was on track to make the playoffs – without her.

Doctors 1 through 12 were mystified. One of them wanted to prescribe antipsychotics.

By the time she reached the office of Yurvati, who is Chairman and Professor of Surgery for UNT Health, Kylie “looked like a rag doll,” said Myra Stewart, LVN. “All the other doctors had told her the pain was in her head, that there was nothing physically wrong with her.”

"I'm healed. It feels so good saying those words. The words bring me this indescribable happiness. I still get teary-eyed saying them. What you did for me is amazing."

~Kylie Ducat

Kylie despaired of ever being helped. She prayed that day that Yurvati would be “lucky number 13,” the doctor who finally would determine the cause of her pain.

He was.

After a thorough history and exam, he determined that Kylie had an injury to a structure at the end of her breastbone called the xiphoid process.

“It was the first thing I thought of,” he said. “It was pressing on the sac enclosing her heart. That’s why she couldn’t breathe and why it was so painful.”

What caused it to happen? A freak injury.

Kylie had been running cross country when she was struck by a car. She knew a rib was fractured but didn't know why the pain continued after the rib healed. Thus began the journey to physician after physician.

Kristin Ducat, Kylie's mother, was doing research on the Internet and posted this plea on a

Xiphoid process

Kylie Ducat, who spent a year getting a xiphoid process injury diagnosed, wants to get the word out about this rare condition.

The xiphoid process starts as a cartilage protrusion from the breastbone that turns into bone in adulthood. Trauma to the chest or lifting heavy objects can cause it to become tender, creating abdominal pain, chest pain, nausea or radiating pain to the back, neck or shoulders. In Kylie's case, her xiphoid process was injured when she was struck by a car while running cross country.

Surgery was the best treatment for her. Injuries to the xiphoid process also can be treated with anesthetic and steroid injections.





board where xiphoid symptoms were discussed: “I would like to take her to somebody who is familiar [with this condition]. Can you please help point me in the right direction? We are located in Texas but at this time are not scared to travel.”

Finally she found Yurvati. Ten weeks after surgery, Kylie was back on the basketball court. In that first playoff game she scored a three-pointer. And she was on the team when the Lady Eagles from Brock High School, near Weatherford, won the 2A state championship.

“It’s rewarding just to know the importance of that diagnosis and to be able to change a kid’s life like that. If the doctors had put her on antipsychotics, her life would never have been the same.”

~Al Yurvati, DO

“I was thrilled they won the state championship,” Yurvati said. “It’s rewarding just to know the importance of that diagnosis and to be able to change a kid’s life like that. If the doctors had put her on antipsychotics, her life would never have been the same.”

Kristin Ducat has entered another post on the Internet. This time it read:

“My daughter ... injured her xiphoid. It took us forever to find the right doctor to diagnose her and schedule the surgery. We used Dr. Yurvati in Fort Worth. He was absolutely amazing. I would recommend him to anyone.”

And Kylie? She expressed her thoughts in a letter to Yurvati: “I’m healed. It feels so good saying those words. The words bring me this indescribable happiness.”

To see a video about Kylie's story, visit www.youtube.com/watch?v=B_kY2KCdmTc





Kylie's letter

The following is from Kylie Ducat's letter to Albert Yurvati, DO, who correctly diagnosed and treated her for a xiphoid process injury after 12 other physicians could not pinpoint the problem.

I'm healed. It feels so good saying those words. The words bring me this indescribable happiness. I still get teary-eyed saying them. What you did for me is amazing.

I really can't be mad at the doctors who were unable to diagnose me, but I can't help having a sense of frustration towards the doctors who acted arrogantly and refused to listen. You are unlike any other doctor or person that I have ever met. The moment you started talking, I honestly didn't care whether or not you could diagnose me. You were kind. I don't know how to quite explain it, but you radiate this warmth and kindness. But when you did diagnose me, phew, I am so thankful.

[I was told by other physicians] that I needed to be put on antidepressants, have more attention at home, that the pain was not being caused by physical means and that I was faking an anxiety attack. I have never felt so low in my life. I was embarrassed. They brought in a psychiatrist, and I cried uncontrollably as she came to the ridiculous conclusions even though I kept telling her I just wanted to be fixed. It was really a horror. I just prayed that you would be the one, lucky number 13.

After about two-and-a-half months post-surgery, I was back. I had my speed back, my coordination, I could breathe AND I was pain free!! My first play-off game I hit a three, I could defend my girl and run without gasping for air. After the game I had to step outside of the locker room and compose myself because I was so emotional. I never felt so good in my life. I can breathe, I can run, I can relax, I can sleep at night, and I can be me again. All the anguish and frustration is gone, and now I can go on with my life and see what God has in store for me next. Thank you, doctor. I am so blessed.

Love,
Kylie

Dedicated to creating

FORT WORTH

Throughout our 43-year history, the UNT Health Science Center has focused on creating healthier communities. We've never been in a better position to fulfill this promise on multiple fronts:

Medical education. Medical sciences. Public health. Research into medical advances. Bringing medical innovations to market. Patient care. Sharing our knowledge with others. And we are here to serve.



healthier communities

Our 4,000 faculty, staff and students deliver on these elements and also volunteer their time to work with the public.

We connect the dots in improving the health of our communities locally, in Texas and throughout the world.



Our graduates are creating healthier communities throughout the world while UNTHSC implements solutions locally, regionally, nationally and globally.

Healthier communities...



We help plant community gardens in Dallas "food deserts," where there are few grocery stores.

start at home

Entrepreneur Jim Rohn once said, “Take care of your body. It’s the only place you have to live.” We at the UNT Health Science Center heartily agree and expand that concept to our community.

We believe the best place to start is right here with our neighbors— from the very youngest through our work to improve infant mortality rates – to the most senior through our state-of-the-art geriatrics programs.

Here are some of the ways we impact Fort Worth and the surrounding area.

Producing needed primary care docs

The Texas College of Osteopathic Medicine sends a significant percentage of graduates (62 percent in 2012) into primary care residencies. This is the highest rate in Texas and second highest of any medical school in the country ranked by *U.S. News & World Report*. UNTHSC’s emphasis on primary care helps address Texas’ shortage of primary care physicians.

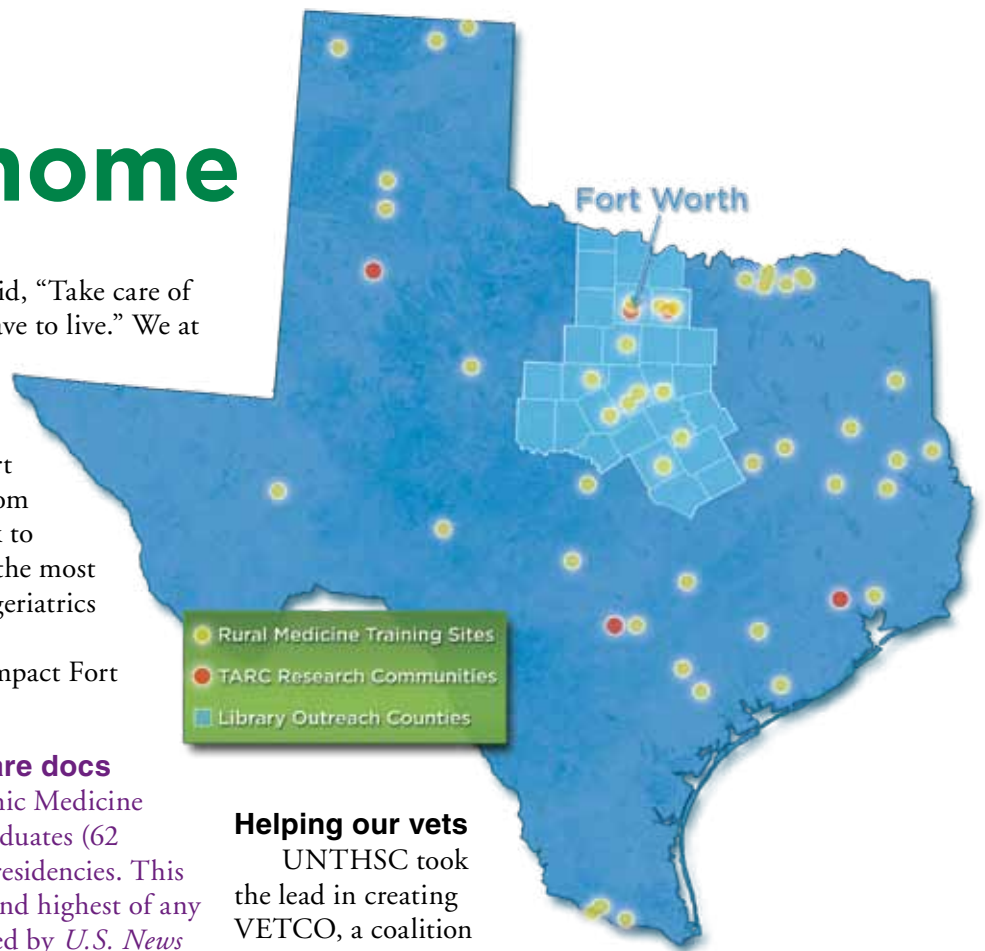
UNTHSC took the lead to develop VETCO to coordinate veterans' services located in Tarrant County, improve collaboration and advocate for vets.

Acing licensing exams

TCOM graduates score among the highest in the nation on medical licensing exams. Our Physician Assistant Studies students posted a 100 percent pass rate the last two years.

Addressing high infant mortality rates

Our Healthy Moms, Healthy Babies, Healthy Communities program engages community partners with investigators from UNTHSC’s Texas Prevention Institute to reduce infant deaths, one of Fort Worth’s major health issues.



Helping our vets

UNTHSC took the lead in creating VETCO, a coalition to coordinate the many veterans’ services available in Tarrant County by providing a central contact, identifying service gaps, improving collaboration, facilitating programs and advocating for veterans’ issues.

Evaluating probationers' mental health

UNTHSC’s Mental Health Screening Initiative created here employs easy-to-use computer-based technology to assess probationers, increasing the likelihood that potential mental issues are diagnosed and treated. The Tarrant County Alternative to Incarceration Program has screened more than 2,000 probationers.

Serving rural communities

Our Rural Osteopathic Medical Education (ROME) program offers innovative approaches to prepare medical students for life and practice in rural areas. About 30 percent of TCOM graduates choose to practice in smaller Texas communities. The Rural Cancer Prevention Education program, based in our Center for Community Health, brings cancer screening education to more than 2,200 rural primary care physicians in Texas.



UNTHSC outreach programs allow youngsters to get an up-close look at medicine.

Supporting health ministries

More than 25 South Dallas African-American churches are banding together to reduce cardiovascular disease by developing health ministries and training lay health providers. Part of the strategy is to alleviate “food deserts,” urban areas that lack grocery stores selling fresh fruits and vegetables, by helping churches plant community gardens. The Texas Prevention Institute’s GoodNews and Healthy Harvest programs helped develop these ministries and community gardens.

Bringing discoveries to market

Emerging companies bringing new technologies to market can get a boost from the TECH Fort Worth Acceleration Lab at the UNT Health Science Center. Funded in part by a state of Texas grant, the commercialization initiative provides valuable support services and lab space.

Providing academic-based patient care

More than 230 physician and non-physician providers practice at UNT Health, one of Tarrant County’s largest multi-specialty physician practices. UNT Health has nearly 600,000 patient encounters annually and delivers more than 7,500 babies a year.

UNTHSC helped found FitWorth, a Healthy City initiative that has enrolled thousands of Fort Worth ISD children in a new program to encourage healthy behaviors such as physical activity and nutritious eating.



Helping prostitutes find another way

The Prostitute Diversion Initiative, launched in 2007 by the Dallas Police Department with the UNTHSC School of Public Health and several other organizations, targets prostitutes in a monthly operation at Dallas-area truck stops. Offenders can avoid arrest, jail time and endangering public health as part of an intervention by law enforcement and community health services. As an at-risk population for homicide, they also can have DNA reference samples taken.

Giving students experience with seniors

Older adults mentor our students in the Seniors Assisting in Geriatric Education (SAGE), the largest such program in the country. More than 650 UNTHSC students provide free basic exams to hundreds of older adults, visiting them in their homes to advise about safety and community resources. In turn, the students learn about geriatric medicine straight from the source.



◀ Physician Assistant Studies students spent a Saturday morning volunteering with Fort Worth Mayor Betsy Price (center) at the Trinity Trot C.A.L.F. run for youngsters.



▲ UNTHSC co-founded the Hispanic Wellness Fair, which has provided health screenings for thousands of Fort Worth residents.



◀ Girls Inc. conducts an annual summer camp at UNTHSC focusing on life sciences.

Supporting healthy lifestyles

Since UNTHSC founded the Cowtown marathon and associated races in 1979, it has become the second-largest multi-race running event in Texas. More than 300 faculty, staff and students volunteer thousands of hours at the races.

Partnering with national medical libraries

Our Gibson D. Lewis Library provides outreach to the public, health professionals, hospitals, researchers and others as a Resource Library of the National Network of Libraries of Medicine. It also helps people in 28 Texas counties access reliable health information.

Serving the underserved
 More than 150 UNTHSC volunteers provide free health screenings during the annual Hispanic Wellness Fair, which UNTHSC cofounded in 1999. Faculty, staff and students from various schools and departments provide screenings in blood pressure, glucose, height/weight/BMI; soft-tissue treatment demonstrations; patient education on matters such as HPV vaccine; and assessments and recruiting for the Healthy and Aging Brain Study Among Latino Elders (HABLE). We also offer more than 10 outreach programs for underserved students, such as our Camp Med Academy, which gives students a hands-on look at medical education.

TCOM students provide free health screenings at local homeless shelters.

Being earth-friendly

In 2011 we recycled 233 tons of cardboard, paper, plastic, aluminum and glass, saving nearly 3,000 mature trees and enough electricity to power more than 80 homes for a year. Building retrofits have saved the equivalent of 59,000 trees and 241,000 gallons of gasoline, with an investment of \$8.6 million that should pay for itself in 10 years. Our Medical Education and Training (MET) Building is rated LEED Gold. Compared to a similar building of the same size that's not so rated, the MET saves about 250,000 gallons of water and \$55,000 in energy costs per year.



Developing a blood test to diagnose Alzheimer's

UNTHSC, as a partner in the Texas Alzheimer's Research Consortium, has helped analyze almost two million genetic markers in 800 participants from Fort Worth, Dallas, Houston, San Antonio and Lubbock using state-of-the-art genetic analysis technology. Analyzing the proteins in a serum-protein-based blood test may lead to new diagnostics, drugs and therapies to improve Alzheimer's patients' quality of life.

Helping teens earn college credit

UNTHSC founded the Texas Academy of Biomedical Sciences with the Fort Worth Independent School District. It enables middle and high school students to earn up to two years' college credit while preparing for careers as physicians, veterinarians, emergency medical technicians, forensic pharmacists and homeland security officers.

Giving back our time

Our students and employees contribute tens of thousands of volunteer hours per year to the community:

- Free health screenings at homeless shelters
- Health fairs
- DO Dash run
- Cowtown races
- Team physicians
- After-school programs
- American Heart Association
- Relay for Life
- Cowtown Cruisin' for a Cure
- Habitat for Humanity
- Tarrant Area Food Bank
- Toys for Tots
- Bowling for Kids' Sake
- Light the Night for Sight
- American Cancer Society
- Many others

Students also serve as tutors for the Texas Academy of Biomedical Sciences program and assist with North Texas high school science fairs.



◀ UNT Health, our patient care practice, is one of the largest multi-specialty groups in Tarrant County.

▲ TCOM students offer hepatitis B screenings in Asian communities. Asians are more at risk for the disease.

TCOM students serve on the Cowtown races medical team. ▶



Keeping blood banks full

Faculty, staff and students donate more than 200 units of blood to Carter BloodCare annually during campus blood drives.

Supporting healthier communities

Our employees back their commitment to healthy communities with their pocketbooks more than most organizations in the country. Close to three-fourths of employees contribute to the UNTHSC Campus Pride giving program. Their donations go to causes like the Tarrant Area Food Bank, the SafeHaven shelter for domestic violence victims and the Cook Children's Health Care System Neuroblastoma Fund.

Supporting a healthy city

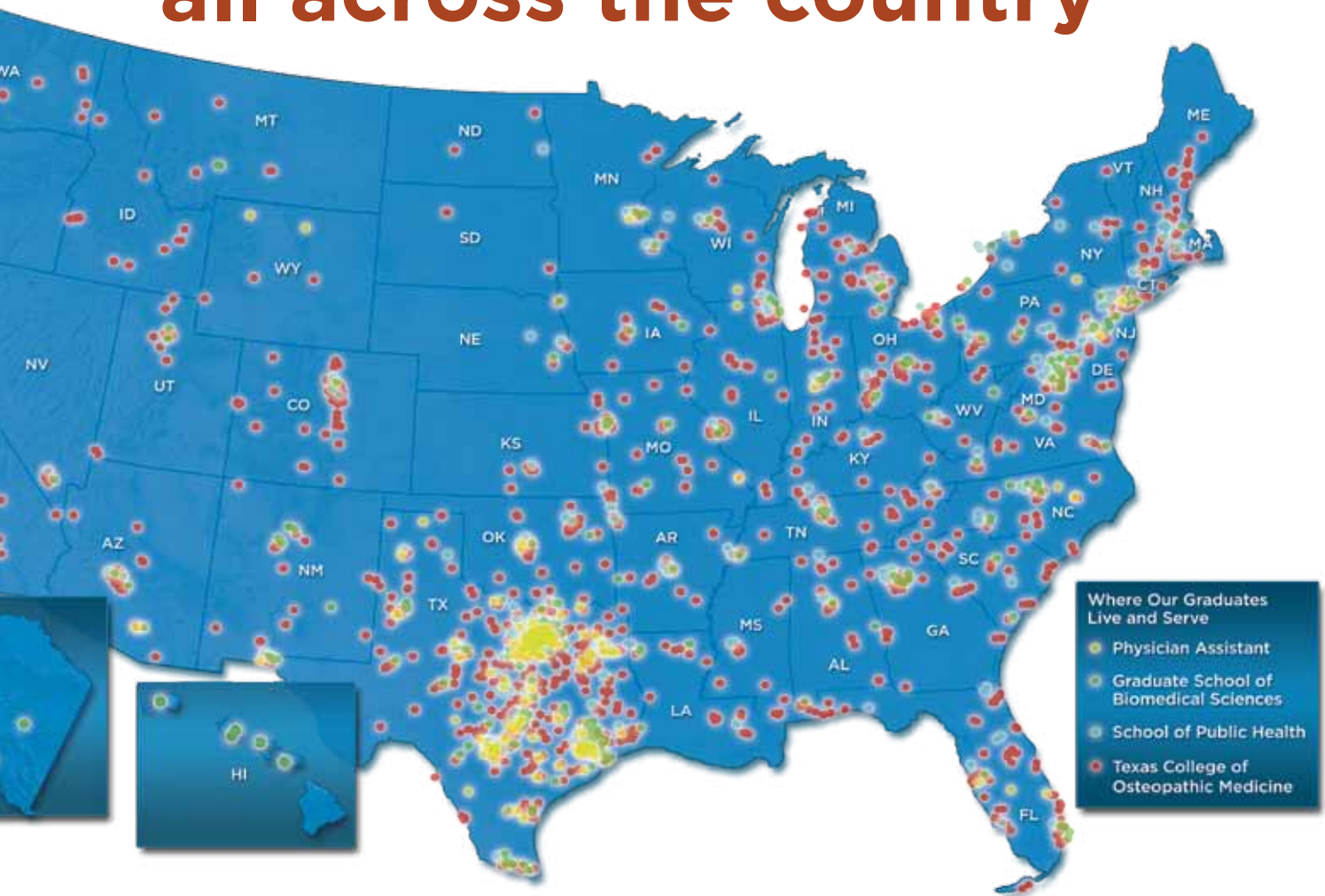
UNTHSC is a founding partner of the FitWorth Healthy City Initiative, a family-focused venture of Mayor Betsy Price and the Fort Worth City Council launched this past fall to address the growing trend of childhood obesity. The initiative raises visibility for healthy activities and food choices. For example, FitWorth enrolled 26,800 Fort Worth schoolchildren in a recent eight-week healthy lifestyle challenge.

Healthier communities...



Ranjit Chakraborty, PhD, Professor, Forensic and investigative Genetics, with his team. Chakraborty's lab is exploring individualized medicine, treatment tailored to each patient's DNA.

all across the country



Great work is meaningless unless its benefits are shared. Helping us do that are our 6,003 graduates, who are working around the nation treating patients, improving public health and researching cures for disease.

Keeping seniors out of the hospital

To help prevent hospital readmissions of residents in assisted-living centers, UNTHSC and Brookdale Senior Living are launching a \$7.3 million training program funded by the U.S. Department of Health and Human Services to train close to 11,000 workers in 35 states. The training will focus on ways to reduce acute care transfers and use technology to identify, assess and manage residents' clinical conditions.

The UNT Center for Human Identification has helped identify hundreds of criminals and their victims and has processed more skeletal remains than any other facility in the country.

Keeping "PACE" with new knowledge

Each year our PACE (Professional and Continuing Education) program provides lifelong learning and continuing education to 18,000 national medical professionals and researchers, the public health workforce and others who promote health and safety.

Ranking high nationally among our peers

U.S. News & World Report ranked us 12th in rural medicine, 15th in geriatrics, 16th for family medicine and 35th in primary care for 2013.

More than 6,000 have graduated from UNTHSC, including researchers, public health experts, health professionals, and physicians practicing primary care and specialties, including Jeffrey Alpern, DO ('79), Cardiovascular Surgeon (below).



Partnering with the CDC to control TB

UNTHSC is one of 10 national research sites for the Centers for Disease Control and Prevention-sponsored Tuberculosis Epidemiologic Studies Consortium. Under School of Public Health leadership, this 10-year, \$5.3 million contract is focused on strengthening and coordinating tuberculosis research across a variety of entities.

Supporting our military

G.I. Jobs magazine has designated UNTHSC a “Military Friendly School” each year since 2010. Currently, at least 35 students are veterans, and more than 20 are in the military. Our faculty and staff include 68 proud veterans.

Identifying criminals and their victims

The UNT Center for Human Identification has helped identify hundreds of criminals and their victims, processing more skeletal remains than any other facility in the country. The center is one of only three agencies in the country authorized to use the FBI’s Combined DNA Indexing System (CODIS) and the only academic center. By September 2012, the center had helped identify 888 persons in 47 states using CODIS.

Art Eisenberg, PhD, leads our internationally acclaimed forensic and investigative genetics program.





▲ Graduate U.S. Army Maj. Robert Carter III, PhD, GSBS ('01), MPH ('03), came to UNTHSC as part of our diversity outreach program. Here he is pictured with Robert Kaman, PhD, JD, retired associate dean, Graduate School of Biomedical Sciences.

▲ Our SAGE program pairs senior mentors with students and is the largest such program in the country. David Farmer, PhD, discusses healthy aging with seniors.

Encouraging diversity in life sciences

We have many national summer outreach programs, several of which support diversity in the life sciences. Among them is the Historically Black College or University Undergraduate Collaborative Summer Training Program in Prostate Cancer, which allows undergraduate students to work in a research laboratory, learning from faculty and senior graduate students. The Ronald E. McNair Post-Baccalaureate Achievement Program helps low-income individuals who are first-generation college students and/or traditionally underrepresented in graduate education pursue doctoral study.

Finding missing persons

UNTHSC manages the National Missing and Unidentified Persons System (NamUs) database under a grant from the U.S. Department of Justice. NamUs is a national centralized repository for missing persons and unidentified remains. It is a free online system that can be searched by law enforcement officials and the general public in hope of resolving these cases.

PHI Air Medical, a national air ambulance provider, landed a medevac chopper on campus so students could get a look at emergency transport.



▲
Dennis Minotti, DO, Adjunct Clinical Assistant Professor, treats patient using osteopathic manipulative treatment. The Osteopathic Research Center, the nation's premiere program located on our campus, conducts extensive research on the effectiveness of osteopathic manipulative medicine.



▲
Students have the opportunity to share their research findings with poster judges, faculty, and other students throughout the day at the annual Health Disparities Conference.



◀ Jose Pagan, PhD, will help find ways to prevent hospitalization of assisted living center residents in 33 states with a \$7.3 million grant.

School of Public Health students tour the Tarrant Public Health Laboratory in preparation for service throughout the country.



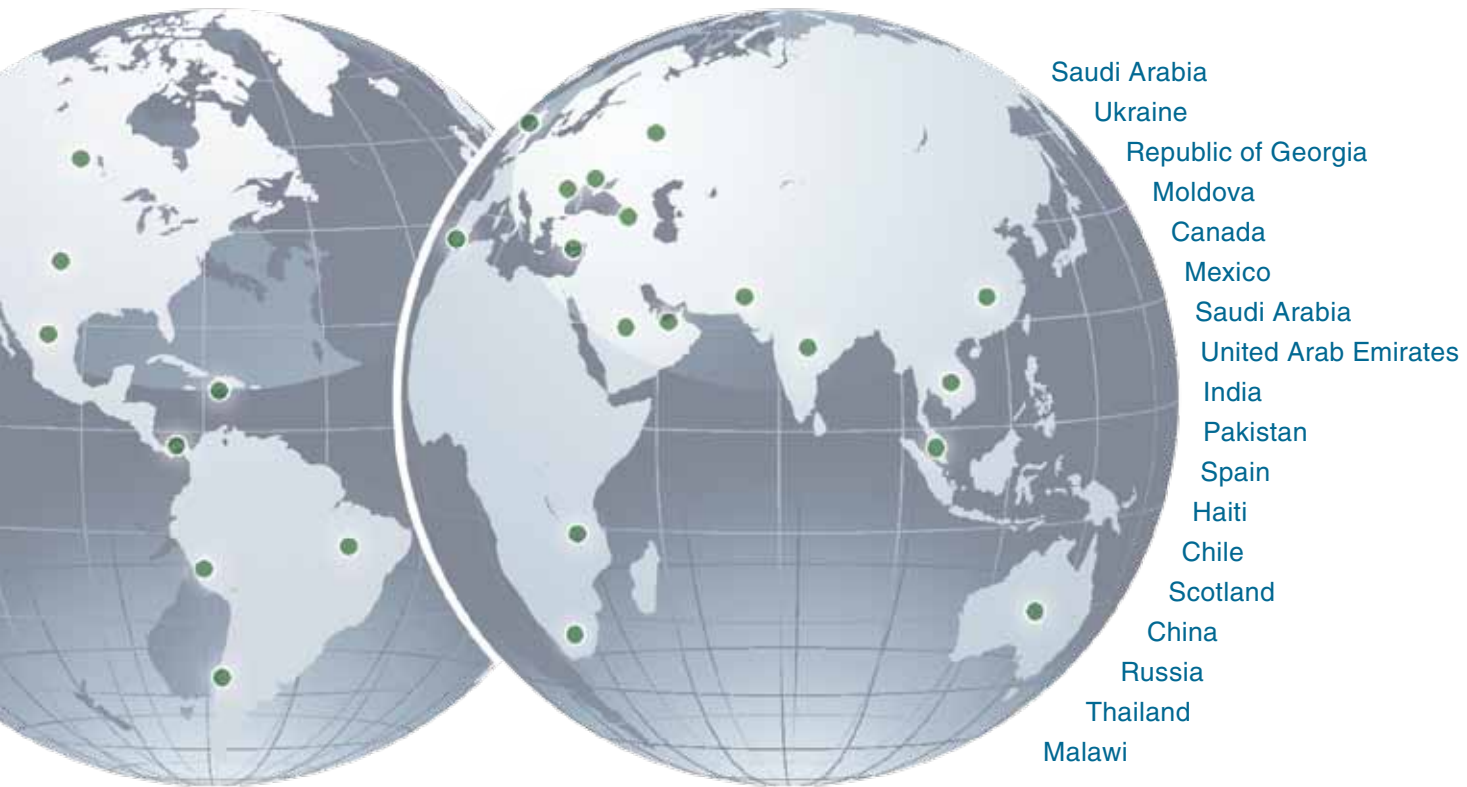
▲ The Health Science Center launched its Doctor of Physical Therapy program in 2010 to address the national need for physical therapists. Here Yasser Salem, PT, PhD, Associate Professor, demonstrates pediatric physical therapy techniques.

We are one world...

Protecting global environments is the focus of our School of Public Health's Environmental and Occupational Health Department. Here Chairman David Sterling, PhD, (right) is studying environmental issues in Peru. He serves on two committees related to gas drilling, including the Barnett Shale Monitoring Focus Group of the Texas Commission on Environmental Quality.



yet one community



We are all citizens of the same world, and we all can learn from each other. Spin the globe, and you'll find a UNT Health Science Center presence on most every continent.

Here are some of our programs with global reach:

Using DNA expertise globally

The DNA-PROKIDS program, a partnership of UNTHSC and the University of Granada in Spain, helps reunite trafficked children with their families in multiple countries using genetic identification. Our lab often assists foreign nations, such as helping the Chilean government identify victims of the 1973 Pinochet coup.

Establishing international partnerships

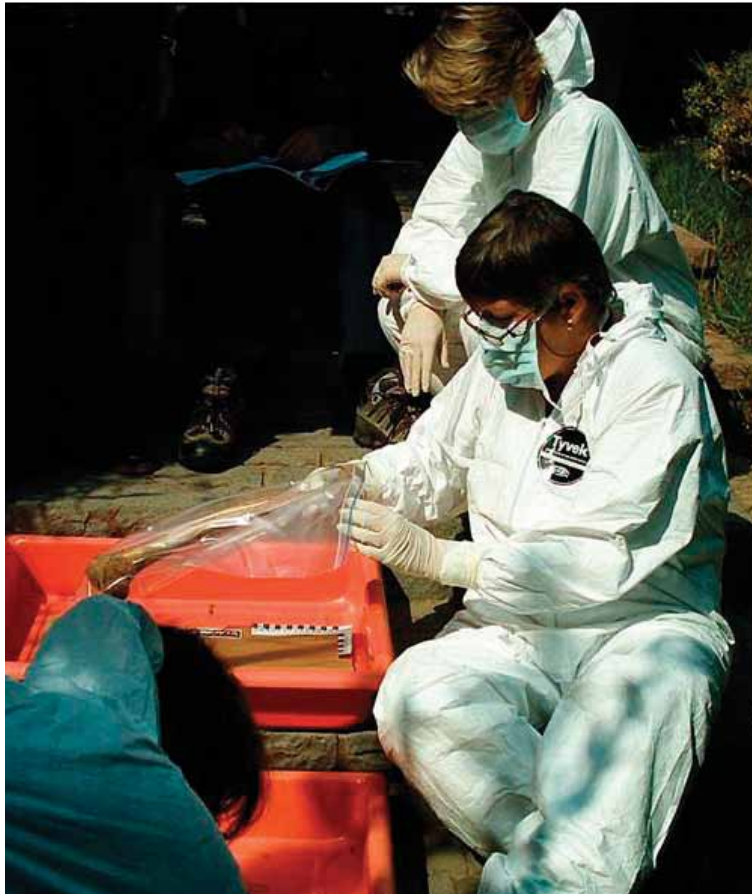
We have research agreements with universities in Scotland, Russia, India and Mexico, and we offer international field experiences in Malawi, Africa, to TCOM, School of Public Health and Physical Therapy Program students.

Teaching the world to process DNA

The Life Technologies Center for Forensic Excellence teaches scientists from around the world how to process DNA.

Mentoring a global science fair winner

Alakananda Basu, PhD, mentored the winner of Google's first international science fair, Shree Bose of Fort Worth, after scientists elsewhere had turned her down.



◀ Rhonda Roby, PhD, and Paco Etxeberria work at a Chilean cemetery to identify Pinochet coup victims' remains before heading to the laboratory.



▲ The Life Technologies Center for Forensic Excellence that opened this year trains professionals from around the world.

Igor Malyshev, MD, PhD, helped forge an international partnership between the Health Science Center and the Russian Academy of Sciences in Moscow, where he is a faculty member.



▶ UNTHSC students flew to Haiti to help the public following the country's 2010 earthquake.





◀ President Scott Ransom, DO, his wife, Elizabeth Ransom, MD, Texas Health Resources President and CEO Doug Hawthorne, local government and other volunteers established the Open Arms Clinic in Tanzania, Africa, last year. We are exploring student rotations at the clinic to enhance their global and clinical experience.

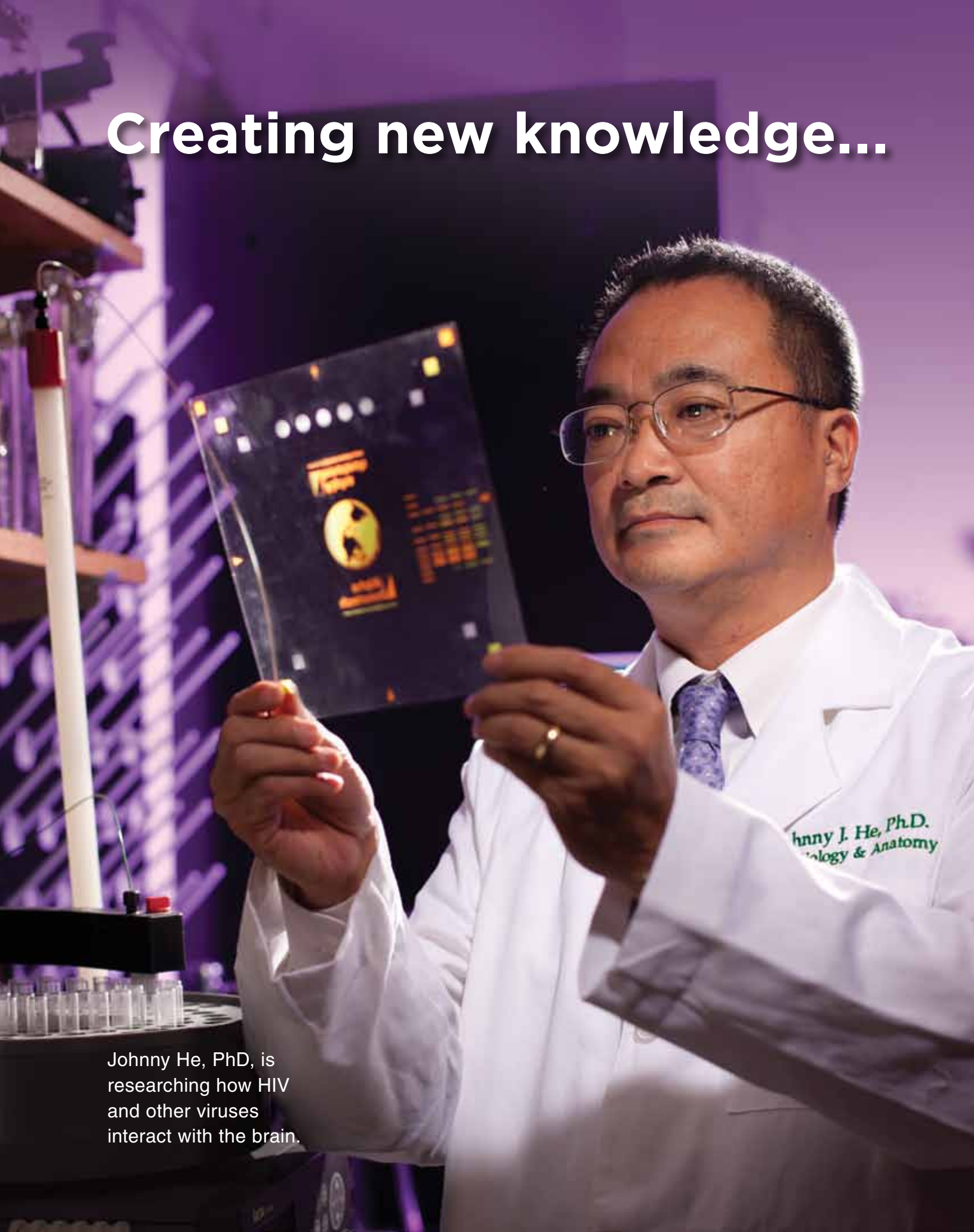


▲ John Podgore, DO, examines a young malaria patient in Malawi, Africa. TCOM now offers international rotations for medical students there.



▲ Since 1996, 80 TCOM students have received military commissions upon graduation and served around the world.

Creating new knowledge...



Johnny He, PhD, is researching how HIV and other viruses interact with the brain.

and new cures

We do more than disseminate knowledge – we add to it. And, we take laboratory bench research a step further by focusing on “translational research,” projects designed to produce results that can be implemented to improve patient care.

We spend \$42 million per year in funded research, and we have the highest research growth rate of all Texas health science centers. Some of our key research areas are:

Primary care

The North Texas Primary Care Practice-Based Research Network (NorTex) conducts research in primary care and public health matters including health disparities; behaviors that influence smoking, obesity and other lifestyle choices; epidemiology; and measuring the effectiveness of community programs.

Texting and driving

How many deaths result from texting and driving? Leading the research on this important public health concern is School of Public Health assistant professor Fernando Wilson, PhD, whose studies have been noted as among the first to place a figure on the number of motor vehicle deaths resulting from cell phone use and distracted driving.

Early diagnosis of autism

Researchers from UNTHSC and across the Metroplex have teamed up to pinpoint the earliest possible opportunity to diagnose and treat autism. The collaboration among UNTHSC, UT Arlington, the Dallas Autism Treatment Center, Texas Instruments and Hanson Robotics hopes to diagnose autism while a child is still developing motor skills.

Healthy aging research

Our Department of Pharmacology and Neuroscience holds two large National Institutes of Health grants for the study of brain aging. One addresses why we don't all age the same cognitively, and the other addresses effectiveness of hormone therapy over time. Funding of two such program project grants within the same division is increasingly rare.



Fall prevention

Our room-size “video game” virtual reality environment is actually a laboratory where researchers analyze adults’ gaits in order to prevent falls. Our virtual reality system is the only such system in an academic setting and one of only five in the country.

Abundant water supplies

UNTHSC research has led to a paint that keeps zebra mussels from attaching to water intake pipes in local reservoirs, ensuring adequate public water supplies. The mollusks are invading North Texas waterways, clogging the pipes.

Preserving vision

Researchers on campus are working to prevent vision loss by understanding the mechanisms of visual disorders such as glaucoma and macular degeneration – as well as developing new therapies to treat vision disorders.

Researchers around the globe have cited UNTHSC-authored research articles more than 33,000 times since 1996.

Bringing discoveries to patients

Our Health Institutes of Texas centers allow us to work interprofessionally to bring discoveries made during laboratory bench research to the patient’s bedside more quickly.

Rosalie Uht, PhD, maintains our Brain Bank, where we conduct research on Alzheimer's disease and other dementias.



Using a state-of-the-art virtual reality system, researchers from all disciplines collaborate on ways to prevent falls in the elderly.



Steve Mifflin, PhD, Chair and Professor of Integrative Physiology (center), and Tom Cunningham, PhD, Professor of Integrative Physiology, director of our Cardiovascular Research Institute(right), and team collaborate on research related to heart disease.



Jon Schetz, PhD, is researching ways to keep invasive zebra mussels out of water lines.



Sid O'Bryant, PhD, with his team, is developing a blood test to diagnose Alzheimer's disease.



Our Center for Commercialization of Fluorescence Technologies was established to produce new diagnostics and treatments.



School of Public Health students have conducted research and health education in locations such as Laredo, Texas.

KEEPING YOUNG ATHLETES IN THE GAME OF HEALTH

UNT Health sports medicine physicians Alan Stockard, DO, and Daniel Clearfield, DO, who is a concussion specialist



Likely, you've watched it happen from the bleachers: A high school football player goes down during a game, and the crowd grows silent while the team doctor examines the injury. In the best-case scenario, the player walks off the field to relieved applause.

The first on-the-spot examination can make all the difference in an athlete's future.

UNT Health's Dan Clearfield, DO ('07), and Alan Stockard, DO ('76), volunteer their time as team physicians to help ensure student athletes stay in the game ... safely. They agree this is growing even more important not only for athletes, but for everyone who risks injury.

"We know exercise improves health and helps prevent certain disease," said Stockard. "We want to encourage a healthy lifestyle, but there will be more risk of injuries just due to the sheer numbers of people who start exercising. Our job is to make sure we can keep everyone working out and healthy."

"If an injury occurs, it is important to properly



Student Hunter Smith (TCOM '16) and Daniel Clearfield, DO, with a player and trainer for Fort Worth's Southwest Christian School.

evaluate it on the sideline," Stockard said. "By seeing the injury immediately it is easier to make an accurate clinical diagnosis before swelling sets in."

And there is growing concern over the damage to young brains from concussions. Clearfield is one of the few certified concussion specialists in North

Texas, and he says that as primary care physicians who specialize in sports medicine, he and Stockard approach injuries from the whole-body perspective.

"We can be more adept at recognizing and diagnosing concussion injuries, and we have a better understanding of the multidisciplinary approach to

"Our job is to make sure we can keep everyone working out and healthy."

~Alan Stockard, DO

their management," he said. "We are skilled not only in musculoskeletal medicine, but have knowledge that spans nearly every medical field, including neurology, psychiatry, physiatry, cardiology, rheumatology, orthopedics, osteopathic manipulative medicine and so on. We understand how all those specialties come together in the evaluation of the athlete."

Added Stockard: "We look for what caused the injury and suggest ways to prevent recurrence in the future."

Texas College of Osteopathic Medicine students accompany them to games to help prepare them for potential future roles as team physicians.

A role Clearfield and Stockard perform with passion – rewarded only by knowing they are helping keep athletes healthy.

To see a video about Daniel Clearfield, visit www.youtube.com/watch?v=nU6ZUCg2rpQ

Docs detect life threatening heart conditions during boxer exams



Daniel Clearfield, DO, and Texas College of Osteopathic Medicine students examined boxers to ensure it was safe for them to fight in a local tournament. Pictured are TCOM ('15) students David Barnes and Andrew Fisher, Clearfield, and TCOM ('15) students Scott Kleppe and Jimmy Kelley.

As a volunteer at a recent weekend boxing tournament, Dan Clearfield, DO, and a team of student physicians screened 111 participants, and excluded two youngsters from the competition because of potentially lethal heart conditions the participants weren't aware of – possibly saving their lives. The physicians also treated two concussions, two stubborn nosebleeds, two injuries to the nasal septum and a sprain. Those treated – and even those not cleared to fight – were grateful for the detailed examinations and care.

Unique features of the UNT Health sports medicine program

Daniel Clearfield and Alan Stockard, both DOs, practice at UNT Health's Bone & Joint Institute at the Ben Hogan Center on the Texas Health Harris Methodist Hospital campus. In addition to treating all sports injuries, they treat patients from the whole-body perspective embraced by osteopathic medicine, and they use osteopathic manipulative treatment (OMT).

OMT is hands-on care in which osteopathic physicians gently move muscles and joints to align the body, relieve pain and improve function. UNT Health sports medicine practitioners also

offer unique treatments for acute and chronic muscle, ligament or tendon injuries – as well as joint instability and arthritis – that stimulate healing. Many practitioners offer only traditional corticosteroid injections, which temporarily relieve pain but do not cure the underlying condition.

The Bone and Joint Institute offers all orthopedic specialties for one-stop treatment and provides same-day appointments and extended hours on Mondays.

To schedule an appointment, call **817-735-DOCS**.

A physician with a mission

Madge Barnes has a knack for being at the right place at the right time – she's saved two lives using the Heimlich Maneuver



Madge Barnes, MD, doesn't believe in coincidence.

When she found herself in the right place at exactly the right time to save a choking person's life, she knew it was God's work. When it happened again a few weeks later, she knew it wasn't luck but part of her mission.

The first incident was at the JPS Central Arlington Clinic where she is Medical Director (she's also an Assistant Professor of Community Medicine at the Health Science Center). Olga Longoria, a clinic Receptionist, was enjoying lunch in the break room, joking with her co-workers.

When Longoria put half an orange slice in her mouth, suddenly she couldn't breathe and she couldn't swallow.

"I thought I was going to die," Longoria says today. She grabbed a co-worker's arm and pointed to her throat. They tried but couldn't help.

In the next room, Barnes had just canceled an appointment that would have taken her away from the clinic. "I heard on the intercom, 'Break room! Stat!'"

She rushed in, threw her arms around Longoria and applied the Heimlich maneuver. The offending fruit shot from her mouth.

"She saved my life," Longoria said, recounting the incident months later. "If she hadn't been there, I wouldn't be here today."

Barnes said her presence was "divinely ordered."

"I believe we have a mission in life, and God guides us as we walk the journey to get there."

~Madge Barnes, MD

"If I had gone to that appointment. ...And I'm also the only one here who could get her arms around Olga." Longoria some time ago suffered an unsuccessful gastric bypass and now has a hernia. Barnes stands 5' 8" and at age 54, she stays fit.

"She's an angel," said Longoria, who plans to retire in January at her 71st birthday.

She's an angel not just to Longoria. One

evening in late July, Barnes set out for a Mexican restaurant. Returning home to retrieve her wallet, she changed her mind and went to a barbecue place.

She was eating when she looked up and noticed a woman attempting the Heimlich on a man in a wheelchair. Barnes went over, announced she was a doctor, got behind the wheelchair and performed the Heimlich, successfully dislodging the food.

She was pleasantly surprised a few days later when the family sent her a thank-you gift, although she said it wasn't necessary. "I was just very thankful I didn't go to the first restaurant I'd considered."

It wasn't luck, Barnes says, but God at work. "I believe we have a mission in life, and God guides us as we walk the journey to get there."

What brought her from her home state of North Carolina to the Metroplex?

"In the space of one year I lost both parents and six other relatives," Barnes said. "That was 1996. In 1998 I moved to Texas."

Watching TV she had become captivated by Bishop T.D. Jakes of Dallas and his Potter's House ministry. Now she's as active there as in her medical practice. She has served as director of its three medical ministry locations, is responsible for first aid during services and organized last fall's Health Expo.

In 2005, Barnes was Mentor of the Year in the teen debutante program at the church of 30,000 members. One of her contributions has been educating girls about medical careers.

Fighting sickle cell disease is another passion for her. She is among the nation's few primary care

doctors with the skills to treat sickle cell disease/trait. "I am likely the only family physician in North Texas with an interest in managing the disease for these patients," she said. She will soon begin mentoring TCOM medical students in the disease during their rotations and residencies in her clinic. She is working to establish a Sickle Cell Center for Excellence in North Texas.

She supports Feed the Children financially. "I will fight anyone to preserve the rights of the very young and the very old. I can't stand to see a neglected older person or a hungry child."

But Barnes is no humorless crusader. An autumn Sunday afternoon is likely to find her jumping up and down and high-fiving at Cowboys Stadium when the Dallas Cowboys score.

"Work hard, play harder," she advises. "You have to do that to stay energized."

Which isn't easy, facing the relentless flow of disadvantaged patients who arrive at her clinic. "The biggest challenge is being all things to all

patients. Often the real issue isn't their illness but something else, like having to choose whether to pay for food or medicine."

But the rewards are great. Recently she used all her powers of persuasion to get a patient to have a colonoscopy. Cancer was discovered early enough that treatment was successful.

"Her husband came to me and said, 'You saved my wife.'"

Said Barnes, "Some people travel halfway around the world in their mission. I've found mine 10 miles from my home."



Madge Barnes, MD, with Lindon Dodge, the man whose life she saved by performing the Heimlich maneuver at a local restaurant.

A meditation on mastication

From the father of a man saved with the Heimlich Maneuver



Tom Dodge is an author and, since 1988, a KERA-90.1 FM radio commentator and book critic for *The Dallas Morning News*.

By Tom Dodge Guest Columnist

On June 19, 1974, Isaac Pika is said to have performed the first Heimlich maneuver, on a diner, Irene Bogachus, in Bellevue, Wash. That same year, the Brody School of Medicine was established at East Carolina State University in Greenville, N.C.

On a Saturday afternoon in July 2012, Madge Barnes, MD, coincidentally a 1987 graduate of the Brody School of Medicine, happened to be in a restaurant in Arlington, Texas, when our son, Lindon Dodge, choked on an errant piece of barbecued brisket.

Barnes, an Assistant Professor of Community Medicine at the UNT Health Science Center, a UNT Health physician and medical director of the JPS Central Arlington Clinic, said she had “debated between that place and another restaurant in town.” The Dodge family appreciates her choice – and her skills.

Many years before his fame, Dr. Henry Judah “Jay” Heimlich was a drum major at Cornell University in Ithaca, N.Y. His gridiron footwork may have led to his courtship and nuptials with Arthur Murray’s daughter.

Although he is credited with the lifesaving maneuver, calling it at first a remedy for the

“café coronary,” there is another claimant, a colleague of his, Dr. Edward Patrick. The latter assertion may very well be true, but good luck on getting anything renamed the Patrick maneuver.

In any case, the American Heart Association refers to the procedure as “abdominal thrusts” and recommends first applying five “back blows” to remove an obstruction from the airway of a conscious person. The American Red Cross recommends the “five and five” method – five back blows first, then if no success, five chest thrusts.

When Barnes noticed our trouble and came to help, she was interested only in restoring oxygen to a choking man. Lindon’s mother, Brenda Dodge, an RN, had already sprung into action but was not strong enough to apply the necessary force she knew was needed.

After two thrusts by Barnes’ powerful arms, the brisket relinquished its occupation of Lindon’s esophageal airway.

Choking by obstructed airway killed about 2,500 people in 2009, according to the American Safety Council. Choking on food kills 100-200 each year, children being especially susceptible. Doctors recommend that parents cut their children’s food in very small pieces.

As for Dr. Heimlich, he is 92 and still touting his eponymous method, as well as various controversial treatments such as malariotherapy, the injection of cancer patients with the malaria virus. Irene Bogachus lived 22 more years after getting another chance to chew her food properly. Lindon Dodge, 52, paralyzed since 1982, says he hopes to do the same, with the help of others and the kindness of strangers.

In Remembrance

Carl E. Everett, DO, one of TCOM's founders

Carl E. Everett, DO, a founder of the Texas College of Osteopathic Medicine, died Aug. 27, 2012.

President Scott B. Ransom, DO, who delivered a eulogy at Everett's service, said "Dr. Everett made, in my opinion, the most incredible contributions to this institution over the last 40 years of any person, period."

Dr. Everett was born in 1914 and in 1939 earned a doctor of osteopathy degree from the now-Kansas City University of Medicine and Biosciences—College of Osteopathic Medicine.

Dr. Everett practiced in Missouri for the next decade and brought his young family to Fort Worth in 1949 at the urging of friend Roy Fisher, founder of the Fort Worth Osteopathic Hospital (FWOH), which opened in 1956.

"Dr. Everett made, in my opinion, the most incredible contributions to this institution over the last 40 years of any person, period."

~Scott Ransom, DO

The organization that later became the Texas Osteopathic Medical Association in 1961 appointed a committee to establish an osteopathic medical school. George J. Luibel, DO, who would become the first chairman of TCOM's board of directors, invited Dr. Everett and D.D. Beyer, DO, to complete the trio of officers necessary for the 1966 granting of a state charter. In 1970 TCOM opened with a class of 20 students.

The Everett Education and Administration Building was named for Dr. Everett in July 2011, and a plaque bearing his likeness was unveiled. It is displayed at the building's second-floor entrance.

Together with longtime business partner



Carl E. Everett, DO

Dorothy Sullivan, Dr. Everett built and managed a series of nursing homes across North Texas, including the Western Hills Nursing Home in Fort Worth, which opened with three DOs and three MDs and was used by TCOM students for their geriatric rotations.

Dr. Everett said he engaged the MDs so osteopathic students could gain experience working with MDs as colleagues, something he felt would become increasingly common during their careers.

Dr. Everett received a "Doctor of Philanthropy," UNTHSC's highest level of philanthropic support, in 2009. He also received an honorary Doctor of Humane Letters degree from TCOM in 1977. In 2012, he was honored by the Fort Worth Business Press with a lifetime achievement award as a Health Care Hero.

Beyond his vision and many honors, Dr. Everett possessed a special attribute described by Tim Sullivan, a UNTHSC Foundation Board Member and Dorothy Sullivan's son: "Carl was always instrumental at bringing people together."



Solutions for a healthier community

The UNT Health Science Center is nationally ranked for primary care, rural medicine, family medicine, geriatrics, physician assistant studies and public health by *U.S. News & World Report*. The UNT Health Science Center, located on 33 acres in Fort Worth's Cultural District, is exclusively a graduate-level university focusing on the life sciences. It is home to:

- Texas College of Osteopathic Medicine
- Graduate School of Biomedical Sciences
- School of Public Health
- School of Health Professions
 - Physician Assistant Studies
 - Physical Therapy
- UNT Health, our faculty physician group, one of the largest multi-specialty physician practices in Tarrant County.
- UNT System College of Pharmacy
(scheduled to open in fall 2013)

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