

# NORTH TEXAS HEALTH & SCIENCE

2011, Issue 2

Magazine of the UNT Health Science Center



**Unexpected court play:  
Students restart classmate's heart, pg. 8**

**TCOM thriving at 40-year checkup, pg. 4**

**Student survives earthquake, pg. 16**

# Message *from* the President



In May, the UNT Health Science Center conducted its 38th commencement ceremony, conferring graduate degrees to 387 students representing the Texas College of Osteopathic Medicine, the Graduate School of Biomedical Sciences, the School of Public Health and the School of Health Professions.

As these graduates begin their careers – each of them contributing to a healthier community – I am reminded of this institution’s four-decade tradition of excellence.

In this issue of North Texas Health & Science, we grab our stethoscopes for TCOM’s 40-year checkup, and we find its heart beating stronger than ever. Surely this derives to a large extent from the sound beginning and ongoing care provided by one of our founders, Carl E. Everett, DO. Dr. Everett has created and nurtured with his time, expertise, generosity, and counsel, an institution that today educates the fourth greatest percentage of medical school graduates entering primary care in the nation – physicians who are also known for earning the nation’s top scores on medical licensing exams.

In tribute to this solid foundation, I am proud to announce the re-naming of the Education and Administration Building (Med Ed 1) as the Carl E. Everett Education and Administration building.

This issue also highlights the heart of TCOM’s students, both on campus and off. You’ll read about first-year student Troy Dawley, whose heart literally stopped while playing basketball, then was restarted by quick-thinking, well-trained classmates who stayed calm in a supreme crisis. Already, these students are showing the right stuff to continue TCOM’s tradition of excellence.

I am proud to lead an institution with such a proud history and promising future, and I look forward to the legacy the students from all of our schools contribute toward the health of people everywhere.

Scott B. Ransom, DO, MBA, MPH



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Daniel Freedman

Nasser Ayyad

Troy Dawley

Chris Wood

Steven Maher

Chris Dingess

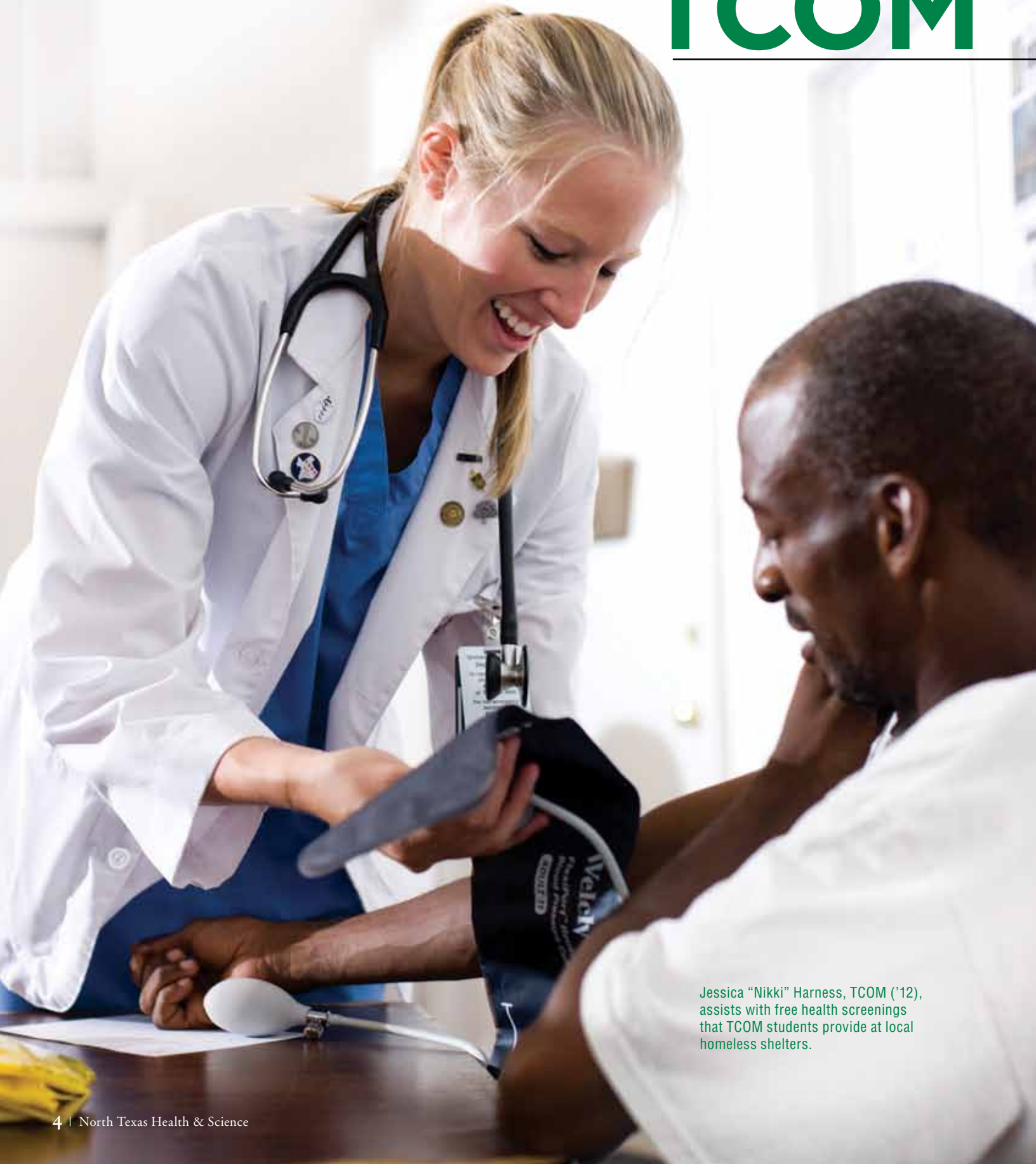
Anthony Arredondo

Luis Gilbert

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**UNT** | **HEALTH**  
**SCIENCE CENTER**

# TCOM



Jessica “Nikki” Harness, TCOM ('12), assists with free health screenings that TCOM students provide at local homeless shelters.

# in excellent health at 40-year checkup

When the 158 members of the Texas College of Osteopathic Medicine's Class of 2011 crossed the commencement stage in May, they entered the next phase of their training well prepared for the journey.

TCOM students continue to lead those of all other osteopathic medical schools in the country on the multi-part Comprehensive Osteopathic Medical Licensure Examination (COMLEX). Since 2007, TCOM students have ranked first in the country three times and second one time in the pass rate for COMLEX-USA Level 1, and they've had the best pass rates for COMLEX Level 2-CE and Level 2-PE for four years in a row.

Level 1, given after the second year of medical school, requires the candidate to demonstrate basic science knowledge – the mechanisms of health, medical problems and disease. Level 2, given after the third year, requires a demonstrated knowledge of clinical concepts and principles necessary for making medical diagnoses through patient history and physical examination.

## Community of support

Such academic success in medical school does not come easily. The first two years in the classroom and the second two in clinical rotations can be stressful and all-consuming. Having support helps.

Thomas Moorman, EdD, vice president of Student Affairs, notes that potential and current students repeatedly cite the school's family-like culture as critical to their decision to enroll and their eventual success.

TCOM students are "among the best in the country, not just because of their outstanding academic credentials, but also because of their community-based orientation," Moorman said. "We have developed a system of education that is collaborative and not competitive. The majority of our students work as much for the collective success of their class as they do for their own

achievements. They are a family and truly care for their classmates."

Moorman also sees a culture of leadership.

"Through our curriculum and student development initiatives, we have empowered our students to take on leadership roles at the state, regional and national levels. Our student leaders address difficult

issues with professionalism, courage and a sense of purpose. We are not just preparing our students for a profession in medicine; we are preparing our students to be leaders in the medical profession."

First-year student Troy Dawley puts it this way: "TCOM is an excellent school. I can't believe how involved the professors are and how much like a family it is."

"TCOM is an excellent school. I can't believe how involved the professors are and how much like a family it is."

~Troy Dawley

## On to residency training

The 2011 graduates are entering residency training at the nation's most prestigious medical facilities, including the Mayo Clinic and the Cleveland Clinic. (See story on page 32.)

From 2007 through 2011, more than 60 percent of TCOM students entered a primary care residency (defined as family practice, obstetrics-gynecology, pediatrics or internal medicine). This ranks TCOM fourth in the nation and best in Texas this year for producing primary care physicians among schools that are ranked by *U.S. News & World Report*.

Residency directors report that TCOM students are impressive.

"Although we get residents from medical schools outside of Texas, most of our osteopathic residents have been graduates of TCOM," said Stephen McKernan, DO, director of the Conroe

Family Medicine Residency Program, based at the Conroe Regional Medical Center. “We are a fairly competitive program, and we graduate excellent family physicians. Many of our top residency graduates have been graduates of TCOM. They have fared extremely well in our program. As an osteopathic family physician, I am proud that we have developed a strong affiliation with TCOM.”

After residency training, young physicians tend to practice in the same geographic area where they completed their residencies. Of current practicing TCOM alumni, more than 2,000 serve in Texas. Of these, 29 percent are estimated to practice in a small town.

## Class of 2015

The incoming Class of 2015 will be the largest in TCOM history – 230 students – bringing TCOM’s total student population to 780. To complement this increase, this fall’s incoming students have a higher GPA than that of any previous group.

And applications jumped 10 percent this year,

while the average state increase was only 5 percent. A majority, 60 percent, of Texas residents applying to medical school through the state application service now apply to TCOM.

Members of the Class of 2015 will meet their first classes having already established a community through Facebook, and many will have attended Preview Day, conducted to familiarize enrollees with life on the UNTHSC campus. When they don the symbol of their profession at the traditional White Coat ceremony for incoming first-year students July 23, they will begin their studies in good hands.

For the 10th consecutive year, TCOM is ranked among the top 50 medical schools in the nation for primary care training by *U.S. News & World Report*. The 2012 national ranking of 20th in primary care was best of any medical school in Texas. TCOM’s geriatrics program was nationally ranked 16th, which was also the best of all Texas medical schools.

Students face an uncertain future for health care delivery, but TCOM Dean Don Peska, DO, MEd, remains confident. “Unlike generations past, our students are pragmatic and individualistic,” he said. “They succeed in an evolving health care



Christian Dean, TCOM ('12), in addition to his studies, is serving as student regent to the UNT System, which oversees UNTHSC, the University of North Texas in Denton and UNT Dallas. He cofounded a free health screening program at Fort Worth homeless shelters.



Cole Zanetti, DO ('11), now part of the NH Dartmouth Family Practice Residency in New Hampshire, was appointed to the American Osteopathic Association/American Association of Colleges of Osteopathic Medicine’s Blue Ribbon Commission on Osteopathic Medical Reform.

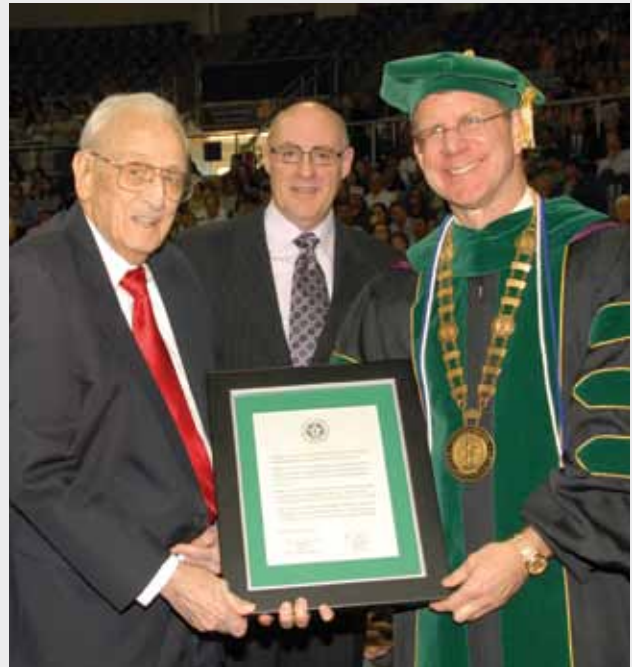
environment on their own terms through personal commitment to themselves, their families and their community.”

“We have carefully invested in our students’ success over the past few years,” adds UNTHSC President Scott Ransom, DO, MBA, MPH. “We just completed a state-of-the-art, 112,000-square-foot Medical Education and Training Building and doubled the number of faculty to over 400. We recently launched the Center for Learning and Development to teach both new and experienced faculty how to better educate our outstanding students in the classroom, clinic and laboratory.

“In addition, we have grown our research programs, our unique Rural Osteopathic Medical Education program and clinical practice to enrich the education and opportunities for our students. TCOM is already the best osteopathic medical school in the country and is well positioned to have an even brighter future.”



Amir Barzin, TCOM ('12), recently was appointed by Texas Gov. Rick Perry as a student member of the Texas Higher Education Coordinating Board, which provides leadership for the Texas higher education system.



UNTHSC renamed the Education and Administration Building for Carl E. Everett, DO, pictured here with Tim Sullivan, UNTHSC Foundation Board member, and Scott B. Ransom, DO.

## EAD Building now bears TCOM founder's name

President Scott B. Ransom, DO, MBA, MPH, announced during commencement that the Education and Administration Building has been renamed the Carl E. Everett Education and Administration Building in honor of Carl E. Everett, DO, one of the Texas College of Osteopathic Medicine's founders.

“Dr. Everett has had an ongoing 40-year commitment to TCOM and has been a faithful and generous donor, adviser to several TCOM deans, founded and served on the UNTHSC/TCOM Foundation Board and has acted as an adviser to several UNTHSC presidents,” Ransom said.

UNT System Chancellor Lee F. Jackson presented Everett with a citation from the UNT System Board of Regents approving the name change.

# Unexpected court play:



Troy Dawley with Steven Maher and the AED machine that helped save Troy's life.



# Med students restart classmate's heart

Troy Dawley knows what it's like when your heart stops beating. Steven Maher knows what it's like to restart one. Troy's heart, in fact.

First-year students Dawley and Maher, both members of the Texas College of Osteopathic Medicine's Class of 2014, had just finished an endocrine quiz and were playing basketball with classmates at Haws Athletic Center in Fort Worth.

Neither man will ever forget the day. It was Feb. 18, 2011.

Dawley was feeling lightheaded, and his last memory at the gym was of seeing the basketball court. Maher looked over just as Dawley collapsed.

"He was trembling, so we moved him on his side because we thought he was seizing," Maher said. "Then [classmate] Luis Gilbert said he couldn't find a pulse."

The next few minutes seemed like an eternity. Maher began chest compressions. Another classmate yelled for an automated external defibrillator (AED), a portable device that can diagnose and treat cardiac arrhythmias with an electrical shock. Chris Dingess called 911. Chris Wood did mouth-to-mouth resuscitation. Dawley's lips were turning blue.

A Haws employee, Todd Hall, brought the AED. Gilbert cut off Dawley's shirt. Maher placed the paddles, cleared and shocked. Still no pulse.

Compressions and mouth-to-mouth continued while the AED monitored Dawley's electrical rhythm.

"We were all scared, and we were all yelling at Troy," Maher said.

Finally, maybe 30 seconds before the ambulance arrived, Dawley's heart, in Maher's words, "came pounding back."

"I felt like a thousand pounds had been lifted off me," Maher said.

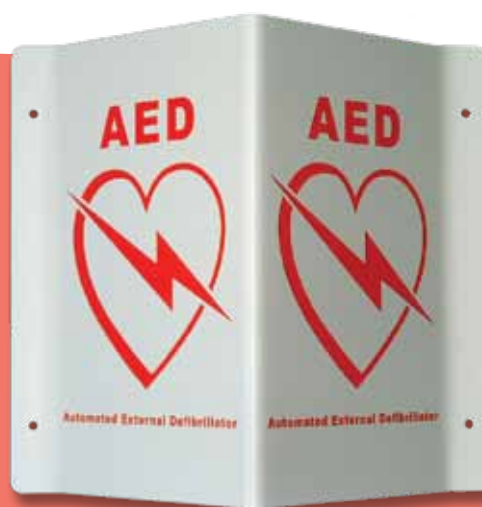
The emergency techs said they responded within five minutes of being called. The students estimate Dawley was without a pulse for three to five minutes.

"The only reason I'm here is because my classmates know CPR and how to use an AED," Dawley said.

When Dawley was en route to the hospital, the

enormity of what had happened hit home. Maher was trying to find a way to contact Dawley's parents when Dingess approached.

"He started taking *my* pulse," Maher said. "I never in a million years thought I would go through that. I just reacted. We had been CPR certified and AED trained during TCOM orientation. It worked almost like clockwork. There was a sense of urgency, but of calm at the same time. It was almost out of this world."



Troy Dawley has a cause: The importance of learning CPR and awareness of automated external defibrillator (AED) use.

"I owe something to increasing public awareness about this," he says.

He will be a key ally with the American Heart Association in encouraging people to learn about CPR and AED use.

AEDs are portable devices that diagnose and treat cardiac arrhythmias with an electrical shock. They are generally located with an AED sign, depicted above.

Visit [www.heart.org](http://www.heart.org) to learn more.

“We looked at him [Dawley], but there was nobody there. When he took a breath, it sounds cliché, but it was like he took a breath of life.”

Maher’s own pulse returned to normal when he saw Troy sitting up at the hospital. Then they wondered – what had just happened?

On the heels of several young athlete deaths across the nation, doctors still aren’t sure what caused Dawley’s episode. The hospital cardiologist called it “sudden cardiac death.”

“I was thinking, ‘I’m 22,’ ” Dawley said. “This is something serious and rare.”

Dawley is fit, has never had a serious medical issue and has no history of heart disease in the family. All test results were normal. An asthma medication may have triggered the attack, and genetic tests may reveal a genetic component.

The episode may never repeat. But if it does, a defibrillator implanted in Dawley’s chest following

the incident will automatically shock his heart back to a normal rhythm.

“I really wanted to play golf that day,” he remembered, “and thank goodness no one else could go with me. If I had been on the golf course, I wouldn’t be here.”

“On the court when the paramedics were putting an oxygen mask on him, he kept saying, ‘Thank you, thank you, thank you,’ ” Maher added. “We all would have done the same thing for each other – it didn’t matter who it was. Everyone had an important role; we worked like a team.”

Both men recalled the day seven months earlier when they took CPR and AED training. They thought they’d never need that knowledge until they were working in a hospital. Now Maher wants to meet with incoming TCOM students to “explain how important those three hours of training are.”



Members of Troy Dawley’s life-saving team, starting from the left, back row: Chris Dingess, Nasser Ayyad, John Smith, Anthony Arredondo, Chris Wood. Front row: Daniel Freedman, Troy Dawley, Steven Maher and Luis Gilbert. Not pictured are Joshua Carlton, David Rothrock and Justin White.

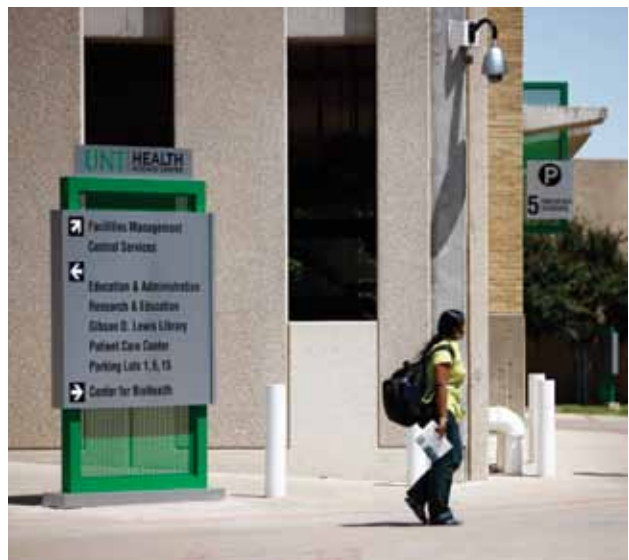
# Facility Update

## More changes coming to campus

More improvements are coming to the UNT Health Science Center campus, including a landscaped plaza in front of the Gibson D. Lewis Health Science Library that will provide a view of the facility from Montgomery Street.

The annex buildings now housing the Physician Assistant Studies (PAS) program and Osteopathic Research Center (ORC) clinical facilities will be demolished. PAS will move to the Carl E. Everett Education and Administration Building, and the ORC will move to a location to be determined.

To better guide visitors and to incorporate the Health Science Center's new logo and colors, signs are being replaced throughout the campus; the work should be complete by the end of August.





Workers install new signs throughout campus.



## Green in many ways: Energy conservation savings so far exceed projection by \$1.8 million

In addition to environmental benefits, the UNT Health Science Center's energy conservation program had already exceeded project savings by \$1.8 million as of January 2011, outpacing projections by almost half.

The program, originally launched in 2000 and expanded last year, involves retrofitting inefficient lighting fixtures, installing motion sensors, adding energy management software on the university network, replacing windows in the Carl E. Everett Education and Administration building and replacing chillers with more efficient models.

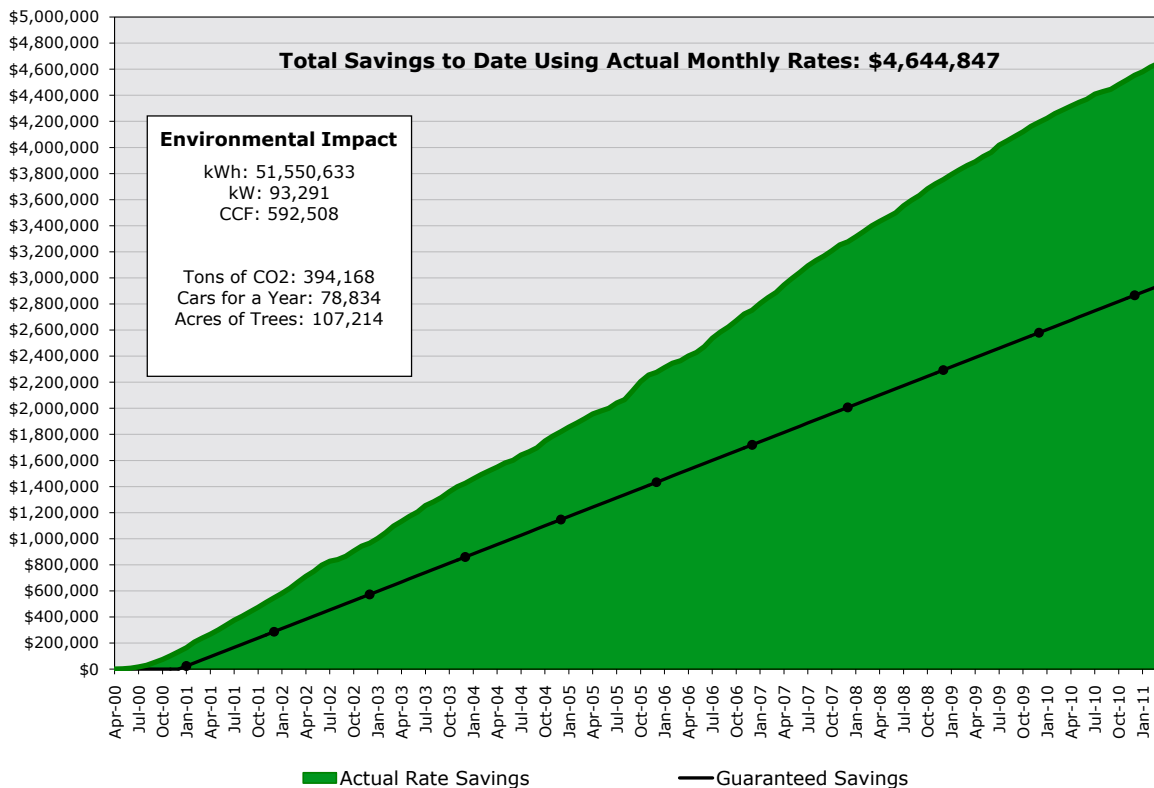
Officials are investing \$8.6 million in the program, and the investment will pay for itself in 10.3 years.

The environment will benefit from annual carbon footprint reductions of more than 650 tons and of carbon dioxide pollution by 2,400 tons – equivalent to planting 59,000 trees and reducing gasoline use by 241,000 gallons per year, according to energy contractor, Schneider Electric.



### University of North Texas Health Science Center

Actual Savings vs Guarantee



Source: Schneider Electric



Andras Lacko's insights led to joint study with M.D. Anderson.

# SEEK AND DESTROY

## UNTHSC-MD Anderson study finds 'good cholesterol' nanoparticles find and kill cancer cells

High-density lipoproteins (HDL), the “good” cholesterol, haul excess cholesterol to the liver for disposal. But new research suggests this good cholesterol can also act as a special delivery vehicle of destruction for cancer.

Synthetic HDL nanoparticles loaded with agents that silence cancer-promoting genes selectively shrunk or destroyed ovarian cancer tumors in mice, research scientists from The University of Texas MD Anderson Cancer Center and the UNT Health Science Center reported in the April edition of *Neoplasia*. The agent used is “small interfering RNA” (siRNA), a substance that carries information from the DNA in a cell’s nucleus into the body of the cell, uses genetic code to assemble proteins and forms part of the platform on which protein synthesis takes place – all processes that are essential to life.

“RNA interference has great therapeutic potential, but delivering it to cancer cells has been problematic,” said Anil Sood, MD, the study’s senior author and MD Anderson’s director of ovarian cancer research and co-director of its Center for RNA Interference and Non-Coding RNA. “Combining siRNA with HDL provides an efficient way to get these molecules to their targets. This study has several important implications in the ability to fight certain cancers.”

Sood and Andras Lacko, PhD, professor of molecular biology and immunology at the UNT Health Science Center, jointly developed the nanoparticles, which build on Lacko’s original insight about HDL’s potential for cancer drug delivery.

The next step is to prepare for human clinical trials. “If we can knock out 70, 80 or 90 percent of tumors without drug accumulation in normal tissues in mice, it is likely that many cancer patients could benefit from this new type of treatment in the long run,” Lacko said.

## Only cancer and liver cells express HDL receptor

Studies have shown that cancer cells attract and scavenge HDL by producing high levels of its receptor, SR-B1. As cancer cells take in HDL, they proliferate. The only other site in the body that makes SR-B1 receptor is the liver. This selectivity for cancer cells protects normal, healthy cells from side effects.

Attempts to deliver siRNA to tumors via liposomes and other nanoparticles have been hampered by toxicity and other concerns. The tiny bits of RNA, which regulate genes in a highly targeted fashion, can't simply be injected, for example.

"If siRNA is not in a nanoparticle, it gets broken down and excreted before it can be effective," Sood said.

Using HDL as the delivery method offers improved safety over other nanoparticles because it is biocompatible. The team developed a synthetic version of HDL, called rHDL, which is more stable than the natural version.

## Fewer, smaller tumors; less toxicity

Using the synthetic rHDL as a delivery method has other advantages. rHDL has not been shown to cause immunologic responses, thus minimizing potential side effects, Lacko said, and it exhibits longer circulation time than other drug formulations or lipoproteins. Also, because SR-B1 is found only in the liver, an rHDL vehicle will help block and treat metastasis to that organ. Safety studies showed that update in the liver did not cause adverse effects.

Using siRNA tailored to the individual gene, the researchers separately shut down two genes in various types of treatment-resistant ovarian cancer tumors. These genes (called STAT3 and FAK) are important to cancer growth, progression and metastasis; however, they also play important roles in normal tissue, so targeting precision is vital.

The siRNA/rHDL formulation alone reduced tumor size and number by 60-80 percent. Combinations with chemotherapy caused reductions above 90 percent.

Conventional approaches to target the STAT3 gene have met limited success, Sood said. The FAK gene, which is over expressed in colorectal, breast, ovarian, thyroid and prostate cancers, is particularly aggressive in ovarian cancer and one reason for the disease's poor survival rate. Previous attempts to target FAK have not been tumor specific and were more likely to harm normal cells, the scientists noted.

## Next step: clinical studies

"In order to help expedite the study's progress to a clinical setting, we have identified 12 genes as biomarkers for response to STAT3-targeted therapy," Sood said. "Next, we'll work with the National Cancer Institute Nanoparticle Characterization Lab to develop a formulation of the HDL/siRNA nanoparticle for human use."

MD Anderson and UNTHSC have applied for a patent for the nanoparticle delivery method.

This research was supported by grants from GCF Molly-Cade, the National Institutes of Health and U.S. Department of Defense, the Ovarian Cancer Research Fund and the Zarrow Foundation, The Marcus Foundation, the University of Texas MD Anderson Cancer Center SPORE in Ovarian Cancer, the Betty Ann Ashe Murray Distinguished Professorship, the Deborah Gonzalez Women's Health Fellowship Award, the Puerto Rico Comprehensive Cancer Center, Cowtown Cruisin' for the Cure and a HER grant from the UNT Health Science Center.

**"If we can knock out 70, 80 or 90 percent of tumors without drug accumulation in normal tissues in mice, it is likely that many cancer patients could benefit from this new type of treatment in the long run."**

**~Andras Lacko**



## Student survives Japanese earthquake, tsunami

Kelly Nelson's journey to Japan started as an internship and ended with Nelson witnessing firsthand how a country struggles to its feet after a devastating earthquake and tsunami.

Nelson, who recently graduated with a master's degree in public health from the UNTHSC School of Public Health, was in Tokyo studying how differences in cultural values and health care systems affect the prevalence and prevention of metabolic syndrome (a collection of symptoms including obesity, hypertension, high cholesterol and diabetes) and HIV. She was to spend most of her five weeks there shadowing physicians at the School of Medicine at Juntendo University Hospital.

Then came March 11. Northern Japan was hit by an 8.9-magnitude earthquake and crushing ocean waves.

With homes destroyed, trains and buses canceled, power down, roads impassable and radiation possibly leaking from two nuclear power plants, Nelson found herself walking for miles with thousands of Tokyo residents, trying to get back to her dorm by following the subway lines.

She recalled what it was like as the quake began. Because they are accustomed to earthquakes, the doctors she shadowed that day in an HIV clinic did not appear alarmed, perhaps largely for her benefit, as she noticed objects shaking on walls and "felt rumblings like a subway rolling beneath the floor."

Work resumed as usual after the quake, but the changes were obvious as Nelson headed home. Elevators were off, furniture had shifted, cell phones weren't working, and warning alerts could be heard from the subway platforms. Instead of saying "goodbye," staff members parted with a Japanese phrase loosely translated as, "Be safe. Take care. Be careful."



Kelly Nelson, MPH ('11)





Nelson wanted to let her family know she was unharmed, but the local library, her Internet source, was closed for four days. Eventually able to use a friend's computer, she checked in with family, friends and professors back home. Responding to Facebook inquiries alone took more than two hours.

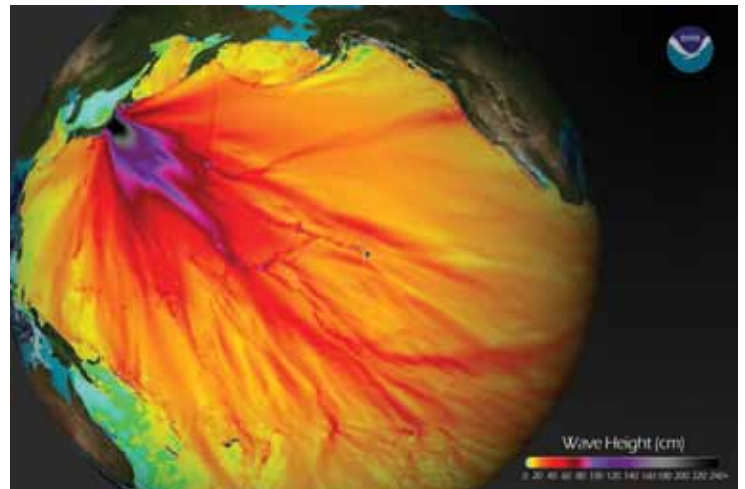
After the initial quake and aftershocks, the real need for public health services emerged in the delivery of clean water, safe food, medicines, shelter and supplies to ravaged areas. Worried about radiation and shrinking food supplies, people started hoarding whatever they could find – bottled water, dry snacks, bread, rice. Electric utilities scheduled blackouts to conserve energy.

Nelson says the Japanese government was very proactive in keeping people informed. At the medical center, teams were called to assist in the hardest hit areas, while others opened their homes to those in need.

And while Nelson's mother suggested it might be time for her to come home, she says she always felt safe and believed it was important to finish out the internship and document the disaster from a public health and visiting student view.

The experience further developed her global perspective, both in terms of the public health response to a disaster and her health care studies at the hospital. In addition to learning from her rounds with the doctors and their patients, she shared the U.S. approach and helped her mentors see certain patient care issues in different ways.

"People tend to think that their own community, city, state or country is unique, but it's important to consider the global view to move outside your own perspective," Nelson says. "People don't stay in one place anymore, and the world really has become much smaller as we connect more and learn from each other."



An energy map from the National Oceanic and Atmospheric Administration (NOAA) shows the intensity of the tsunami, caused by the magnitude 8.9 earthquake that struck Japan on March 11.



Tokyo residents found food in short supply following the earthquake.



# Anuja Ghorpade:

Chair, professor and researcher

The poster on her wall bears a Walt Disney quote: “If you can dream it, you can do it.”

Meet Anuja Ghorpade, a woman with big dreams who’s making them real. She chairs the Department of Cell Biology and Anatomy in the Graduate School of Biomedical Sciences, is a professor who teaches medical and graduate students, a scientist in charge of three major National Institutes of Health funded research grants, and co-director of the Health Science Center’s Brain Bank for neurodegeneration research.

Ghorpade, PhD, is one of the Health Science Center’s many multitasking administrators. She wouldn’t have it any other way. The roles, she says, “all have different delights – different flavors and unique challenges.”

Those flavors could be called gratification, exploration, people and possibility.

Start with teaching, which she says provides instant gratification, “the opposite of research.”

“You have 250 students for three hours during a lecture. Afterward, you might get 50 emails with questions, and the students tell you that you are awesome.” Among the comments Ghorpade has received on feedback forms is one from a student who said she enjoyed the lectures even though the subject didn’t interest her, and this:

“Dr. Ghorpade is in a league of her own when it comes to the desire she has for students to learn.”

The students, Ghorpade says, aren’t the only beneficiaries, pointing out that “the best way to learn something is to teach it.”

So if research doesn’t provide the instant gratification of teaching, what does that role provide? That’s where exploration comes into play.

“You are exploring new ideas and discoveries, following the unknown,” Ghorpade said. “There’s nothing better than finding out your hypothesis is right – or that you’re not right. Even if you find out you’re not right, you’re still discovering something.”

She even enjoys writing grants – seeking monetary support for that exploration – a task that others dread. Why?

Anuja Ghorpade, PhD

“Writing grants is all about the future. You are looking into the next five or 10 years, answering questions.”

Then there’s the department she chairs, where she enjoys working with her team – and where she finds possibility.

“I enjoy working with people. Sometimes you get immediate gratification, and sometimes it’s not so immediate. But when you lead a department, you have the ability to expand and develop new ideas – go in new directions.”

Because each of Ghorpade’s roles is unique, together they offer a collective benefit: work-life diversity.

“Each has its positives. If you focus only on research and you have a challenge with funding that research, there is no other activity to offset that setback. Variety is the spice and joy of work. You wouldn’t want to eat the same meal each morning, afternoon and dinner. Change is exhilarating.”

“Dr. Ghorpade is in a league of her own when it comes to the desire she has for students to learn.”

~From student’s evaluation

And, she said, the Health Science Center benefits because it “develops faculty members into multifaceted individuals.”

“When you are an administrator, it is extremely critical that you know what it takes to do the work so you can protect the faculty members and become their advocate. You better understand all the roles when you do them yourself. It’s only fair that if I expect others to do something, I do it myself.”

Lest you think Ghorpade’s multiple successes come at the expense of a personal life, consider this advice she readily gives:

“Always have a good balance between family and career. Don’t think that one has to give for the other. It doesn’t.”

There are moments in each day that Ghorpade devotes strictly to family – and no work is allowed.

“Just think carefully, plan thoroughly and execute efficiently,” she said.

The result, she believes, is a flavorful life – with more dreams still to come.



Anuja Ghorpade, PhD, conducting research; teaching; and working with Rosalie Uht, MD, PhD, co-director of the Health Science Center’s Brain Bank for neurodegeneration research.

## Another advance in prenatal care

UNT Health’s certified nurse-midwives are taking prenatal care another step forward with the launch of the Centering Pregnancy concept – the first such program in Fort Worth.

Centering is a model of group health care that combines regular check-ups, prenatal education and discussions in a single visit with other pregnant women. The goal is to improve pre-term labor rates and patient satisfaction. It requires certified nurse-midwives to complete specialized training through the Centering Healthcare Institute.

Research shows both the patient and the provider report greater satisfaction – as well as patient outcomes – when Centering is used, said Kathleen Donaldson, CNM, MS, director of Advanced Practice Professionals for the OB/Gyn department.

“Centering may well replace traditional prenatal classes,” Donaldson said, and it relies on an “evidence-based redesign of health care delivery that incorporates assessment, education and support.”

Women in the Centering program meet individually with their personal physician for their regular medical visit, and then join a group of eight to 12 other women to discuss set topics and learn from experts such as dieticians and lactation consultants. The patient’s partner is welcome to attend.

The Centering visit, including the regular patient visit, usually runs 90-120 minutes, Donaldson said. Women are grouped by expected delivery dates so participants can share experiences and insights.

The first Centering groups are being formed at UNT Health’s Health Center for Women in Fort Worth, 1500 Main Street, and the UNT Health at Alliance office, 12650 N. Beach, Suite 148, in north Fort Worth near Keller.

Visit [www.nurse-midwife.com](http://www.nurse-midwife.com) or call 817-735-2300 for more information.



Photography by Vera

Kathleen Donaldson, CNM, MS

### What is Centering?

Centering is a model of group health care for pregnant women, which incorporates assessment, education, and support based on best medical practices.

“Centering may well replace traditional prenatal classes” and relies on “an evidence-based redesign of health care delivery that incorporates assessment, education and support.”

~Kathleen Donaldson

## Surgeon earns quality award for improved hip fracture outcomes

Breaking a hip is one of the most feared injuries among older adults, and with good reason. Close to 310,000 people suffer hip fractures each year, accounting for 30 percent of all hospitalizations.

Arvind Nana, MD, an orthopedic trauma surgeon on the staff of UNT Health's Bone and Joint Institute, spearheaded a multidisciplinary team at Texas Health Harris Methodist Fort Worth Hospital to improve clinical outcomes and decrease the cost to patients.

The hospital presented the Texas Health Fort Worth Quality Cup award to Nana's team for implementing a multidisciplinary approach to caring for the geriatric hip fracture. The process also helped Texas Health Harris Fort Worth become the first hospital in Texas and the fourth in the nation to be Joint Commission certified for hip fracture.

The team implemented measures such as dementia management and vitamin D supplementation to help shorten hospital stays and improve recovery. In addition to a 15 percent decrease in patient care costs, the effort decreased the length of patient hospital stays by 28 percent, and decreased mortality by 0.5 percent. Melanie Barron, DO, an internist specializing in rheumatology at UNT Health, was also a member of the quality improvement team.



Arvind Nana, MD (right), receives the Quality Cup from Texas Health Harris Methodist Fort Worth President Oscar Amparan.



UNT Health at Alliance recently celebrated the opening of its Women's Health and Adult Primary Care facility with an open house. Pictured are UNT Health's Ralph Anderson, MD; Kathleen Forbes, MD; Joanne Mize, Frank Fillipeto, DO; and David Mason, DO.



David Lichtman, MD, indicates all is "A-OK" at the recent opening of the UNT Health Bone and Joint Institute in the Ben Hogan Sports Medicine Center, located on the campus of Texas Health Harris Methodist Hospital Fort Worth. Lichtman is chair of the Department of Orthopaedic Surgery and Podiatry at UNT Health.

# Research

## Energy drinks + alcohol = dangerous concoction

Combining caffeinated energy drinks such as Monster or Red Bull with alcohol may be more dangerous than consuming either separately, according to a study conducted by Dennis Thombs, PhD, professor and chair of the Department of Social and Behavioral Sciences. In Thombs' research, bar patrons near a college campus were asked a series of questions after exiting establishments where alcohol is served, and their breath alcohol level was tested.

The patrons who reported consuming energy drinks mixed with alcohol were three times more likely to exceed the legal alcohol limit for driving and four times more likely to intend to drive a vehicle after leaving a bar. Furthermore, those patrons who consumed alcohol mixed with energy drinks, on average, left the bar later in the evening, drank for a longer period of time and consumed more total drinks and more grams of ethanol, compared to patrons who did not consume energy drinks that night or who consumed energy drinks and alcohol at different times the same night (not mixed together).



Photo credit: DogFromSPACE on Flickr



Dennis Thombs, PhD

## Hormone therapy a treatment for Alzheimer's?

As the population ages and Alzheimer's disease becomes more prevalent, a UNT Health Science Center scientist suggests that hormone treatment for women may help stave off the disease.

"We need to leave no stone unturned in finding treatments and a cure for Alzheimer's," said Meharvan Singh, PhD, chair of the Department of Pharmacology and Neuroscience. And hormone treatments may be one of the best bets.

Hormone therapy for post-menopausal women was called into question after results from the Women's Health Initiative study were published, beginning in 2002. The study was halted after four years when it was determined that the risks of hormone treatments outweighed the benefits.

Singh and other experts, however, contend that without considering the age of the women, the type of hormone and the regimen of therapy, the results do not show that hormone treatment is altogether bad.

"Post-menopausal women are two to three times more likely than men to get Alzheimer's," Singh said. "Hormones have been proven to be good for the brain if the right type is administered in the right way. For example, progesterone protects the brain, while the synthetic progestin used in most hormone therapy formulations does not.

**"We need to leave no stone unturned in finding treatments and a cure for Alzheimer's."**

**~Meharvan Singh**

"We need to evaluate if it would be more beneficial to administer these hormones transdermally, via a patch, or orally, and whether continuously taking the hormones is more or less beneficial than taking them cyclically."

As more studies are conducted, Singh said, some hormones will prove very beneficial against Alzheimer's, especially if given to women in their 50s.



Meharvan Singh, PhD

"Women spend one-third of their lives after menopause, without the protective benefit of these hormones," he said. "I think we owe it to our mothers, our sisters, our wives and our daughters to offer them the choice of hormone replacement therapy, instead of robbing them of the option."



Fernando Wilson, PhD

## Study puts a number on deaths from texting and driving: 16,000

UNT Health Science Center School of Public Health professor and principal investigator Fernando Wilson, PhD, released a report in the *American Journal of Public Health* showing that texting while driving resulted in an estimated 16,000 fatalities in the United States from 2001 to 2007.

The report indicates that a growing percentage of distracted drivers in fatal crashes are males driving alone in collisions with roadside obstructions.

Wilson, assistant professor of Health Management and Policy, along with co-author Jim Stimpson, PhD, analyzed traffic fatalities across the nation from 1999 to 2008 in what may be the first effort to place a number on motor vehicle deaths resulting from cell phone use.

The report used data from the National Highway Traffic Safety Administration on motor vehicle deaths in each state and Federal Communications Commission reports on increasing cell phone ownership and texting volume over the targeted years. The researchers noted that in 2002, one billion texts were sent every month on average and that this number grew exponentially to 110 billion by 2008.

For every one million new cell phone subscribers, Wilson's study estimates a 19 percent rise in deaths from distracted driving. The research concluded that the recent and rapid increases in cell phone usage and texting may be responsible for thousands of U.S. road fatalities annually.



# Alumni

## Alumni help Physician Assistant Studies students gain experience

We'd like to take this opportunity to acknowledge and thank our valued alumni for helping Physician Assistant Studies students gain experience and training by serving as preceptors:

- Lisa Baker, PA-C ('06)
- Ashley Bassett, PA-C ('05)
- Tara Beeler, PA-C ('05)
- Natasha Cha, PA-C ('05)
- Holly Coker, PA-C ('05)
- Jeff Curtis, PA-C ('00)
- Stephanie Curtis, PA-C ('04)
- Amber Downes, PA-C ('05)
- Katie Elliott, PA-C ('08)
- Elisa Gerdes, PA-C ('09)
- Elizabeth Hasten, PA-C ('09)
- Michele Holcomb, PA-C ('09)
- Darren Hughes, PA-C ('00)
- Karen Kindler, PA-C ('99)
- Shelly Lengefeld, PA-C ('06)
- Lisa Hogan- Moody, PA-C ('99)
- Monte Morris, PA-C ('99)
- Tiffani Murphy, PA-C ('99)
- Jennifer Nuessner, PA-C ('07)
- Michael Nye, PA-C ('07)
- Ruth Pinkerton, PA-C ('10)
- Jay Pribble, PA-C ('09)
- Meredith Ryan, PA-C ('00)
- Brooke Sarrett, PA-C ('08)
- Shellie Shepherd, PA-C ('04)
- Judi Thompson, PA-C ('99)
- Diane Urey, PA-C ('00)
- Kristina Widjaja, PA-C ('03)
- Josh Williford, PA-C ('99)



## TCOM students learn about specialties from alumni and friends

More than 100 students participated in this year's TCOM Specialty Roundtable, and they gave the event great reviews for offering valuable information on many medical specialties. For the first time, a fourth-year peer advisor participated, Eric Barcak, DO ('11), and these students helped plan the event: Kristen Taylor ('13), Jessica Edwards ('14) and Madeline Tarrillion ('13).

Many thanks to these alumni and friends of the university who shared information with the students:

- Eric Barcak, TCOM Fourth-Year Peer Advisor
- Dale Brancel, DO ('80)
- Gregory Freiss, DO ('79)
- Danny Harrell, DO ('05)
- Boris Ioff, DO ('04)
- Patrick Keehan, DO ('05)
- John Meehan, DO
- Brian D. Ranelle, DO
- Reagann Richards-McCreary, DO ('05)
- Jeff Steiner, DO ('04)
- Ruth Wiley, DO ('04)
- Albert Yurvati, DO ('86)

**TCOM Homecoming 2011** celebrating classes of 1976, 1981, 1986, 1991, 1996, 2001 and 2006

**September 16-17 • Times and location TBD**

If you are a member of one of these classes and would like to provide suggestions for a fun-filled event, please contact Denise Armstrong, (817) 735-2278, [denise.armstrong@unthsc.edu](mailto:denise.armstrong@unthsc.edu).

# Advancement



## Golfers swing for scholarships



More than 130 players – the most ever – took to the links on April 5 for the sixth annual President’s Invitational Tournament at Ridglea Country Club Championship Course. The tournament netted more than \$40,000 for the Health Science Center’s Foundation to support scholarships and other programs. Special thanks go to presenting sponsor Quest Diagnostics and co-chairs Michele and Fred Reynolds.

To see more pictures from the President’s Invitational, visit the Health Science Center’s Flickr page, [www.flickr.com/photos/unthsc/](http://www.flickr.com/photos/unthsc/)



President Scott B. Ransom, DO, MBA, MPH, with tournament chairs Michele and Fred Reynolds.



Randall Schmidt, Carl E. Everett, DO, and Tim Sullivan



Kevin Long drives for a hole in one.

# In the Community



## Local elementary students attend ‘Mini-Medical School’ at UNTHSC

More than 75 fifth-graders from Fort Worth’s Maude Logan Elementary School learned about X-rays, medical instruments and nutrition – using organ models and anatomy specimens – at the Health Science Center’s third annual “Mini-Medical School” March 22. UNTHSC’s Pediatrics Club and Student National Medical Association hosted the event. The program, sponsored by BBVA Compass to help acquaint children with the medical sciences, provided each student with a backpack, home study supplies, a stethoscope and a T-shirt.



UNT Health and the UNT Health Science Center teamed with Texas Christian University to raise money for the Susan G. Komen Foundation during TCU’s May 14 “Frogs for the Cure” baseball game by providing pink “rally towels.”



**Guests show their support** of the topic “Embracing Our Community of African American Children” by signing a symbolic quilt at the 4th annual North Texas Health Forum, presented by the UNTHSC School of Public Health. Emotional well-being is a significant issue for African American children in Tarrant County, Texas, and more than 250 attendees sought solutions for the issue. Keynote speaker was Dr. Alwyn T. Cohall, director of the Harlem Health Promotion Center and professor in the School of Public Health and School of Medicine at Columbia University.



**More than 350 works** were submitted for the 26th UNTHSC High School Art Show this spring. Several area schools participated, including those from Flower Mound, Hurst-Euless-Bedford, Keller, Arlington and Crowley. Asel Art Supply contributed a portion of the prizes



## 40 Under 40

The Fort Worth Business Press in May named two from the UNT Health Science Center's Department of Psychiatry and Behavioral Health to its 40 Under 40 Class of 2011: Mathew Avila, PhD, assistant professor, and Christina Burress, MBA, associate director.

Avila was recognized for his role in establishing the Byrne Foundation as a means for his family's construction business to support children's mental health programs. He is the foundation's president and has raised more than \$800,000 to support local mental health endeavors. He also was key in establishing Art Station, a nonprofit art therapy center for children in Fort Worth. A successful scientist, Avila has published more than 20 articles in peer-reviewed scientific journals and earned several National Institutes of Health research grants.

Burress, in addition to overseeing the Department of Psychiatry and Behavioral Health budget, helped shape a quality team in Psychiatry involving John Peter Smith Hospital and the Health Science Center, contributing to top-tier patient satisfaction ratings. She is developing administrative curricular topics for medical students on the clerkship rotation for psychiatry. Burress volunteers with the Junior League, Historic Fort Worth and the Baylor University Women's Council.



This spring, six Texas College of Osteopathic Medicine students joined a medical team in Guatemala as part of DOCARE International. The students helped conduct health screenings for indigent residents.





**Members of the Texas College of Osteopathic Medicine’s Class of 2014** honored the families of those who donated their bodies to the UNT Health Science Center for medical education by dedicating a tree “in thanksgiving to our silent teachers” in front of the Medical Education and Training Building in May. For information on the Health Science Center’s Willied Body Program, call 817-735-2047. More about the Living Legacy planting program is at [www.hsc.unt.edu/LivingLegacy.cfm](http://www.hsc.unt.edu/LivingLegacy.cfm).



**The American College of Osteopathic Family Physicians Club** at the UNT Health Science Center partnered with the Make-A-Wish Foundation this year and donated 57 backpacks filled with coloring books, crayons, puzzles, books, stickers, water bottles, sunglasses and beach towels for children to use on their way to their “wish trip.”



**Col. David Sutherland**, special assistant to the Chairman of the Joint Chiefs of Staff, Warrior and Family Support program, joined community leaders at a Warrior Services Forum hosted on campus in March. The forum was part of an effort to improve support of military warriors, veterans and their families locally.

# News & Applause

## UNTHSC maintains top rankings in U.S. *News & World Report*

The Health Science Center maintained its top-50 status for primary care, geriatrics and physician assistant studies in the latest rankings by *U.S. News & World Report*.

The Texas College of Osteopathic Medicine ranked 20th for primary care medical schools, remaining the highest rated of all Texas medical schools for this category. TCOM has been ranked among the top 50 nationwide since 2003. Its geriatrics program ranked 16th, the only Texas medical school listed in that category.

The School of Health Professions' Physician Assistant Studies program ranked 38th out of 123 schools nationwide, maintaining its place in the top 50 since 2004.

## Students have an app for that

Students can now view on a mobile device their class schedule, grades, financial aid status, messages and any holds on their records. The Health Science Center partnered with the University of North Texas to create the mobile site to accommodate student needs. In the future, students will be able to register for classes on the site.

## PACE earns elite accreditation

UNTHSC's Center for Professional and Continuing Education (PACE) received Accreditation with Commendation from the Accreditation Council for Continuing Medical Education through 2017. That places PACE among the top 18 percent of nationally accredited providers.

UNTHSC recently published a report showing that PACE contributed to a \$3.4 million savings



in health care costs through reduced hospital admissions related to chronic obstructive pulmonary disease. The report is available at [www.hsc.unt.edu/education/PACE/](http://www.hsc.unt.edu/education/PACE/).

## Governor names two students to higher ed posts

**Amir Barzin** (TCOM '12) and **Christian Dean** (TCOM '12) were appointed by Texas Gov. Rick Perry on April 20 to serve in higher education posts.

Barzin was named student representative to the Texas Higher Education Coordinating Board, which provides leadership and coordination for the Texas higher education system. Dean was named student regent to the UNT System, which oversees UNTHSC, the University of North Texas and UNT Dallas.

They join 11 student appointees statewide who will serve terms through May 31, 2012.

## Singh, Filipetto named chairs

The Health Science Center has named two new chairs.

**Meharvan Singh**, PhD, became full-time chair of the Department of Pharmacology and Neuroscience effective May 1. He had been acting chair. He joined the Health Science Center in 2001 and has held several leadership roles on campus.

Singh's many awards include Outstanding Faculty Member and the Young Investigator Award from the National Alliance for Research in Schizophrenia and Depression. His research focuses on understanding how specific hormones regulate brain function.

Heading the Department of Family Medicine beginning July 15 will be **Frank A. Filipetto**, DO, now vice chairman of the University of Medicine







## **RAD posts record showing, awards \$12,000 in prizes**

The 19th Annual Research Appreciation Day (RAD) in April attracted an estimated 1,100 visitors and 220 presentations from students, postdoctoral researchers, residents and faculty members. Some 70 industry, private-sector and university judges awarded 36 research awards totaling \$12,000.

Keynote speaker Virend K. Somers, MD, PhD, of the Mayo Clinic discussed sleep apnea and cardiovascular disease. Special thanks go to sponsors Healthpoint Biotherapeutics and Quest Diagnostics.

## **TCOM earns Texas Medical Association Chapter of the Year**

TCOM's student chapter of the Texas Medical Association earned the association's Chapter of the Year honors for the educational opportunities and community service hours members contributed. The Class of 2013 logged more than 4,700 community service hours last year, and the Class of 2014 contributed 2,700 hours in only one semester.

## **School of Public Health offers new PhD program**

The Texas Higher Education Coordinating Board approved a new Doctor of Philosophy (PhD) in Public Health Sciences degree program at the UNT Health Science Center's School of Public Health (SPH). The program will begin in August.

The program prepares professionals for research, teaching and service to improve the health of populations.

The curriculum will provide a strong foundation in research theories, applications and methodology; critical analysis; scientific communications; professional ethics; and discovery and translational research. Students will be able to select advanced training in one specialized concentration: Behavioral and Community Health; Biostatistics; Epidemiology; Environmental Health Sciences; or Health Services and Policy.

The program was developed under the leadership of Christine A. Moranetz, PhD, chair of the Department of Public Health Education and Associate Dean for Academic Affairs in the School of Public Health. The program director is Karan P. Singh, PhD, professor and chair, Department of Biostatistics.

"This new program is an important step toward helping prepare UNTHSC students become the next generation of public health scientists in academic, research and other professional roles," said Dr. Richard S. Kurz, SPH dean.

UNTHSC also offers a Doctor of Public Health (DrPH) degree in Public Health Practice, which prepares seasoned practitioners for advanced leadership roles by focusing on training in advocacy, critical analysis, community and cultural orientation, professionalism and ethics, communication, management and leadership.

For more information, call the School of Public Health, Office of Student & Academic Services, at 817-735-2401; email the school at [sph@unthsc.edu](mailto:sph@unthsc.edu); or visit the School of Public Health website at <http://www.hsc.unt.edu/education/SPH/>.

## **TCOM students celebrate National Osteopathic Medicine Week**

The Medical Student Government Association observed National Osteopathic Medicine Week in April with presentations from Elizabeth Palmarozzi, DO ('84), president of the Texas Osteopathic Medical Association; Bruce Dubin, DO, dean of Rocky Vista University's College of Osteopathic Medicine; local physician D.G. Edwards, DO ('80); and Erin Carlson, DrPH ('10), assistant professor, School of Public Health.

## Commencement 2011

The UNT Health Science Center granted graduate degrees to 387 students in ceremonies May 14 at TCU's Daniel-Meyer Coliseum. Steven A. Wartman, MD, PhD, president of the nonprofit Association of Academic Health Centers in Washington, D.C., gave the commencement address.

Earning special recognition:

- **Caitlin Seykora**, Texas College of Osteopathic Medicine, UNT Health Award, given for scholastic achievement with an emphasis on clinical practice. This is the first year for the award.
- **Sushmita Purkayastha**, Graduate School of Biomedical Sciences, President's Award for Scholarly Excellence, given for outstanding academic achievement.
- **Pabak Sarkar**, Graduate School of Biomedical Sciences, Chancellor's Award, given for excellence in research.



# NORTH TEXAS HEALTH & SCIENCE



## About the UNT Health Science Center

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 the Texas College of Osteopathic Medicine (TCOM), the Graduate School of Biomedical Sciences, the School of Public Health and the School of Health Professions, which includes the departments of Physician Assistant Studies and Physical Therapy. The Health Science Center is dedicated to improving the health and quality of life for North Texas and beyond through education, research and community outreach. UNT Health, our faculty physician group, is one of the largest multi-specialty physician practices in Tarrant County. TCOM, our cornerstone school, is nationally ranked for Primary Care and Geriatrics by *U.S. News & World Report*, as is our Physician Assistant Studies program.

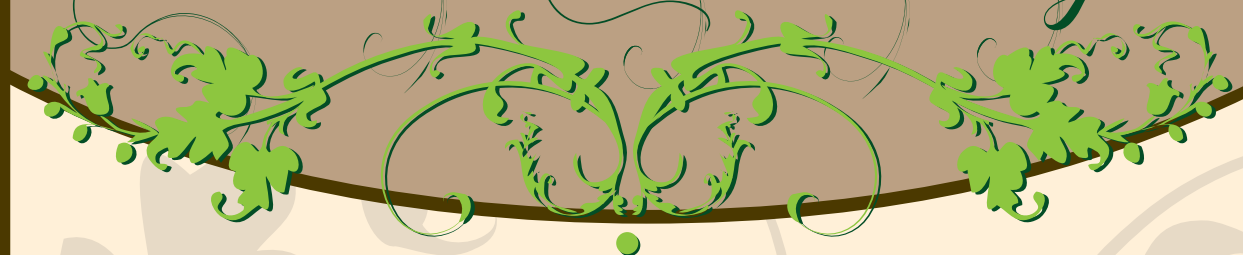
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**UNT** | **HEALTH**  
SCIENCE CENTER

To Your Health and a

*Healthier Community.*



The UNT Health Science Center invites you to attend its annual *To Your Health* gala, celebrating leadership in health science while supporting student scholarships for our School of Health Professions.



**Saturday, November 5, 2011**

**6:30 p.m.**

**Renaissance Worthington Hotel**

**For more information,  
please call 817.735.2445**

**[www.hsc.unt.edu/toyourhealth](http://www.hsc.unt.edu/toyourhealth)**