

PULSE

SUMMER 2008 | A PUBLICATION for ALUMNI & FRIENDS of TEXAS TECH UNIVERSITY | TEXAS TECH UNIVERSITY CENTER

My American Dream

Collegiate track star Sally Kipyego
closes in on her ultimate goal



PULSE



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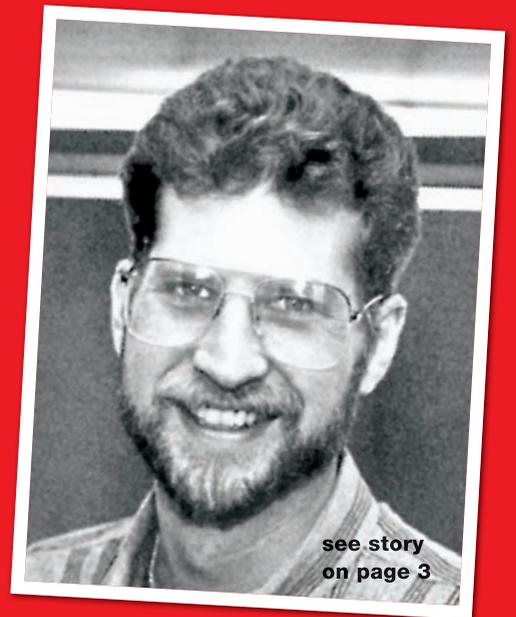
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Kerry Gilbert, PT, ScD, (SOAHS '97, '04)

Guess? WHO

This academician turned administrator has mentored more than 30 Texas Tech Health Sciences Center graduate and undergraduate students since 1981. After graduating from the University of Missouri and completing his post-doctoral training at the University of California at Los Angeles, he joined his mentor, David Hentges, Ph.D., at TTUHSC. Can you name this 27-year devotee?



see story on page 3

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COVER PHOTO: NEAL HINKLE

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CLARIFICATIONS

A photo of Mike Taylor, PA-C, MPAS, associate professor in the School of Allied Health Sciences Physician Assistant program, (Winter 2007) was published with an article about the school's Physical Therapy program in Lubbock. Taylor is not associated with the school's Physical Therapy program.

The alumni profile of Jacqueline Ward, RN, BSN, (Winter 2007) incorrectly stated that she had worked at Texas Children's Hospital in Houston for 20 years. Ward began working at Texas Children's in 1993.



ARTIE LIMMER

HEALTH CARE FOR TOMORROW BEGINS WITH DISCOVERIES TODAY

As scientists and caregivers, we must always remember that society gives us very special privileges. They trust us with their privacy and confidences; they entrust to us their most personal concerns and their very bodies. We must always be grateful to our patients and remember that, in ways not comparable to any other walk of life, our mission is to serve others.

For more than three decades, Texas Tech University Health Sciences Center has been successful in its mission of providing quality patient care and educating the next generation of health care providers. We now must fervently focus on making new discoveries that will allow for a continuum of care into the future.

Already, we have made great strides in this area, with the successful accreditation of our new four-year medical school in El Paso, the creation of the Laura W. Bush Institute for Women's Health, and the recruitment of world-renowned medical researchers to our various campuses.

Throughout the next decade, research will be the hallmark of this great university for research is the key element in making certain that we teach the caregivers of the future in a way that equips them for the new era of curative medicine.

JOHN C. BALDWIN, M.D.
PRESIDENT



COMMENCEMENT COMMENTARY :: Former U.S. Senate Majority Leader, the Honorable William H. Frist, M.D., was the keynote speaker at this year's commencement ceremonies held May 17.

Sen. Frist graduated from Princeton University and received his medical degree from Harvard Medical School. During his two terms in the U.S. Senate, he took a leadership role in the fight against global HIV/AIDS. Frist, a long-time friend of Texas Tech University Health Sciences Center President John C. Baldwin, M.D., still travels at least once a year to Sub-Saharan Africa to care for those afflicted with this disease as well as operate on and care for those with other deadly diseases.

Frist's wife, Karyn McLaughlin Frist, is a published author who grew up in Lubbock. Her book, "Love you, Daddy Boy," released in 2006, features stories from famous fathers and daughters including Condoleezza Rice (John W. Rice), Kay Bailey Hutchison (Allan Bailey), Glenna Goodacre (Homer Glen Maxey) and Rachel Ripken (Cal Ripken Jr.).

To hear his speech, visit www.ttuhscc.edu/communications/pulse



BLESS YOU :: Stuffy nose, headache, cough, chills, congestion ... not only does the flu make you feel bad, it is responsible for more than 200,000 hospitalizations and 36,000 deaths in America each year, according to the World Health Organization.

Texas Tech University Health Sciences Center is taking the lead to find new ways to fight the influenza virus through the newly established West Texas Center for Influenza Research, Education and Treatment. TTUHSC created the center with a \$526,000 federal grant, one of the largest amounts appropriated for the 2008 budget.

School of Medicine Dean Steven Berk, M.D., says TTUHSC will utilize resources from all six campuses to test oral interferon, an antiviral protein naturally produced in the body, as a possible preventative and therapeutic agent. Additionally, TTUHSC experts will examine public policy issues related to preparation of a pandemic influenza attack.

Texas Tech System Chancellor Kent Hance credited the Texas congressional delegates in guiding the system's federal legislative agenda.

"These leaders worked to communicate the national and international significance of our projects to others in Washington," he said. "We are proud that Congress has recognized us as a center of education and research excellence."



TIME-HONORED TRADITION :: Faculty, staff and community members welcomed former Texas Tech University Health Sciences Center President David R. Smith, M.D., to the campus in early May for a tenure appreciation reception. Smith led TTUHSC from 1996 to 2002 and then served as chancellor of the Texas Tech University System. In 2006, he became president of Upstate Medical University at State University of New York. TTUHSC honors its former presidents with a bronze plaque five years after their service to the university. The presidential plaques are on display in the Academic Classroom Building.

Guess? WHO

WINDS OF CHANGE :: “When I drive up every morning, the size of this place is amazing,” says Rial Rolfe, Ph.D. “We used to play softball where the University Medical Center Emergency Room stands today.”

He came to Texas Tech University Health Sciences Center in 1981, when the building’s Pod C, also known as West Wing, was an empty shell. Indeed, the Health Sciences Center has made a few changes since then, adding the Preston Smith Library of the Health Sciences, the Academic Classroom Building and the Texas Tech Physicians Medical Pavilion.

Rolfe has made some changes as well. Through the years, he has held various faculty appointments and established the Office of Faculty Affairs and Faculty Development in the School of Medicine. President John C. Baldwin, M.D., recently named him vice president for Academic Services. With his new appointment, Rolfe will oversee the Health Sciences Center’s accreditation with the Southern Association of Colleges and Schools, all institutional assessment, Office of Student Services, and the new Community Medical School.



TONJA HAGY



TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER™ *Community Medical School*

HEALTH CARE 101 :: This spring more than 200 citizens ranging from high school students to senior adults comprised the inaugural class of the Community Medical School. The program, initiated by Texas Tech University Health Sciences Center President John C. Baldwin, M.D., is designed to educate Lubbock residents about health care advancements being made in their own community and help them make informed decisions about their own health.

Topics in the first mini-semester included insights into the physical exam, cognition and aging, cancer, and heart disease and treatments. The two-hour sessions included lectures, hands-on learning, and enthusiastic discussions of medical issues. Baldwin fashioned the school after one he began at Dartmouth several years ago.

Classes resume in the fall. Citizens of all ages and educational backgrounds are invited to attend.



For more information or to register, visit www.ttuhscc.edu/communitymedicalschooll



the healing

School of Allied Health Sciences celebrates 25 years as helping hand of medicine

TONJA HAGY

"I knew my own experience as a child would help me not only be able to sympathize better as a professional, but also to empathize with my patients as well."

Ashley Varnell, graduate student, Speech-Language Pathology Program



touch

By Kim Davis

From speech pathology to occupational therapy and from audiology to molecular pathology – allied health science professionals truly are the helping hands of medicine. Likewise, the many professionals who practice in the allied health sciences arena truly are the *faces* of medicine to the many patients they serve daily.

“Once patients are treated in the hospital setting, it’s the allied health professional who spends the most time with patients in their recovery processes,” said Ashley Varnell (SOAHS ’07), a first-year graduate student in the School of Allied Health Sciences Master of Speech-Language Pathology program. She also earned her undergraduate degree from the school in Speech, Language and Hearing Sciences.

Now celebrating its 25th anniversary, the School of Allied Health Sciences has grown exponentially – especially in the last decade – to keep up with national demand for professionals in the field.

During the course of his 18-year tenure at the Health Sciences Center, Phillip Sizer Jr., PT, Ph.D., the school’s program director for the Doctor of Science in Physical Therapy and the Clinical Musculoskeletal Research Laboratory, says he has witnessed tremendous growth.

“When I first arrived, we were well-respected regionally,” Sizer remembered. “Now, we are nationally known and quite prolific; I give much of the credit to Dean (Paul) Brooke’s vision that has truly changed our landscape.”

Sizer, who regularly teaches at universities across the country, said he hears over and over that the students graduating from TTUHSC are among the best in the clinic setting and especially in being able to think on their feet.

“I truly believe it’s because of the depth and breadth we embrace here at the School of Allied Health Sciences,” he said. “Across all facets, our students are taught to navigate through a multitude of problems and work closely with patients in the progressive recovery process.

“We have become trendsetters in a number of areas – from diagnostics to research and

rehabilitation – and I know that puts our graduates one step ahead of the others.”

Varnell added that as the population continues to age, the need for allied health professionals will only continue to grow.

But each of the many fields under the allied health sciences umbrella covers much more than just the health care issues of the aging. Varnell, herself, is one such example. She says her career aspirations stem from her own childhood speech challenges that were eventually treated by a speech pathologist.

“I was in fifth grade and still had serious problems pronouncing the ‘r’ sound,” she remembered. “Kids can be cruel, and I remember what I went through – and my twin sister as well – as we dealt with the speech issues we had. It was a speech pathologist who changed all of that and gave us the confidence and the ability to move past our issues and build back our self-esteem.”

Later in life, Varnell says she knew she wanted to go into a profession that helped people. It was her mother who prompted her to consider the field of speech pathology. “I knew my own experience as a child would help me not only be able to sympathize better as a professional, but also to empathize with my patients as well.”

School of Allied Health Sciences Dean Paul Brooke Jr., Ph.D., emulated Varnell’s description of the profession.

“We are the ‘face of healing,’ so to speak,” Brooke explained. “Our services maintain and support quality of life for so many people – both healthy and sick.

“Our students here energize me every day. They are optimistic of the future. Full of hope. Compassion. Commitment,” said Brooke, a retired Army colonel. “Frankly, it recharges the battery for an old dude like me and reminds me of the ‘hoo-ah’ from America’s best.”

Brooke's greatest stand

By Kim Davis

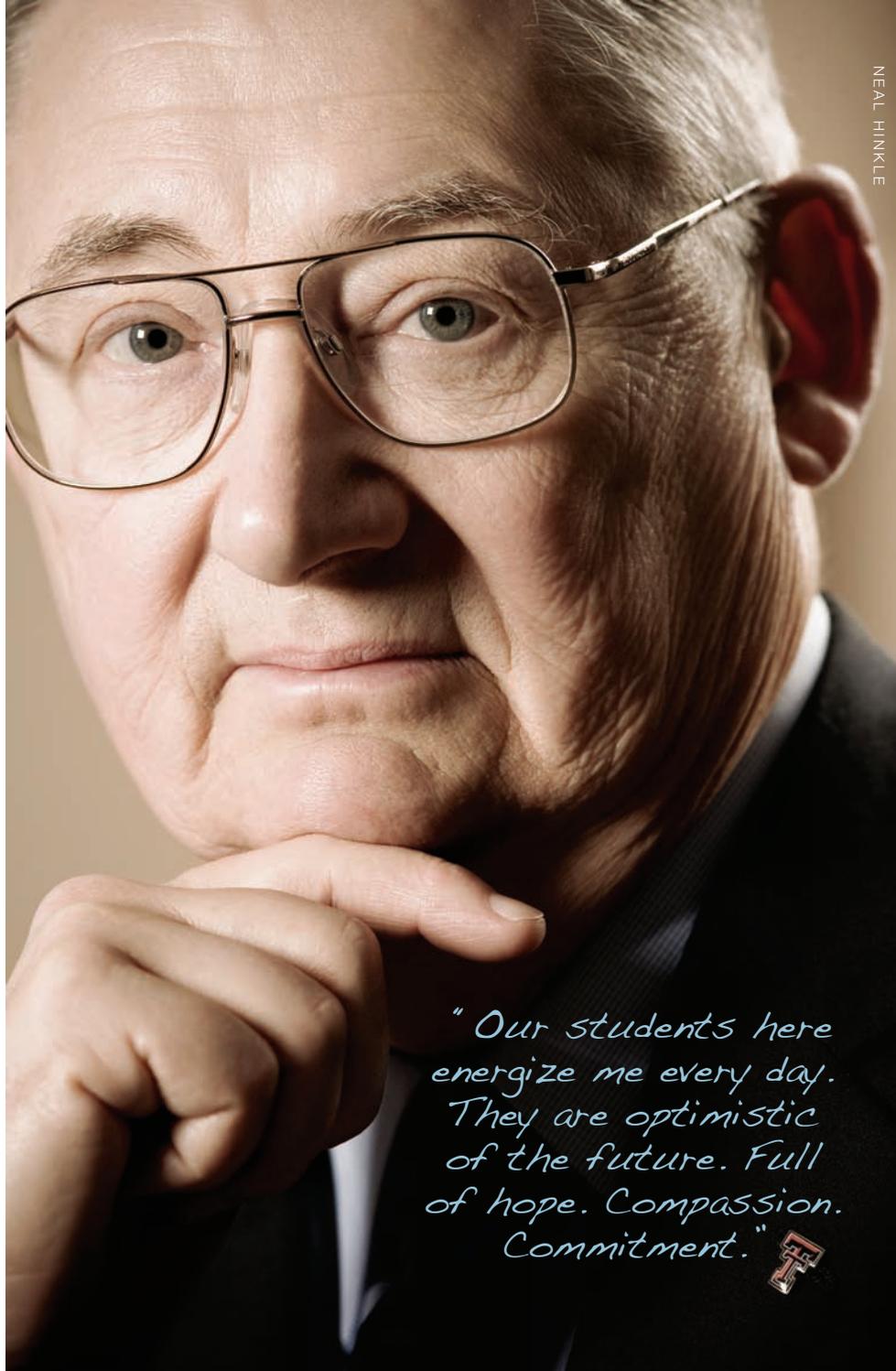
A retired Army colonel standing 6 feet, 5 inches tall, School of Allied Health Sciences Dean Paul Brooke, Jr., Ph.D., can seem a little formidable. But one handshake and a sincere welcome later and it is no wonder Brooke's staff love him, and that his students are leaders in the academic arena of what he calls "the service end of medicine."

Brooke is genuine in his love for the school, and he's proud of the growth they've achieved during the past 25 years since inception. Yet, he's humble when admitting the majority of it has happened during his tenure at the helm.

Initially offering only undergraduate degrees, the School of Allied Health Sciences now offers 15 programs within its four separate academic departments: laboratory sciences and primary care; speech, language and hearing sciences; rehabilitation sciences; and clinic administration and rehabilitation counseling. In addition to undergraduate-level programs, the school offers graduate degrees in seven master's and four doctoral programs.

"Bottom line: We've doubled our enrollment and tripled our degree programs," Brooke explains. "Why? Because we could."

Matter of fact? Yes. But that is Brooke. Then spills the genuine care he has for what his students study, for their accomplishments and for the people in West Texas to have the very best care from his graduates.



"Our students here energize me every day. They are optimistic of the future. Full of hope. Compassion. Commitment."



"Our goal has been to increase academic opportunities for the people of West Texas by offering quality education that meets our geographical demands," he explained. "And, ultimately, to turn out graduates who may choose to stay in this area and contribute to the quality of health and life in West Texas."

While Brooke says his graduates are sought for jobs across the United States, more than 90 percent choose to stay in Texas – many in West Texas. And that's just fine with him.

"We've been pioneers in a number of programs, from offering the first Doctor of Audiology program west of the Mississippi, to having the first Master of Science in Molecular Pathology in the country," he said. "But directly affecting the quality of life and living in West Texas – whether it be for the students seeking an education or the lives they touch after graduation – I'm glad it's all happening right here." **P**

SCHOOL OF ALLIED HEALTH SCIENCES MILESTONES



25th Anniversary Celebration

6 P.M.

THURSDAY, SEPTEMBER 25

FRAZIER PAVILION | TEXAS TECH UNIVERSITY

1981

- 67TH Texas Legislature approves funding for a School of Allied Health

1983

- First students accepted

1985

- Full accreditation received for programs in Physical Therapy, Occupational Therapy and Medical Technology

1991

- Emergency Medical Services program added

1994

- Expansion of Physical Therapy and Occupational Therapy programs to Amarillo and Odessa – extensive reliance on HealthNet
- Expansion of Physical Therapy program from bachelor's to master's degree.

1999

- Addition of Physician Assistant program at Midland
- Expansion of Occupational Therapy program from bachelor's to master's degree

2000

- Addition of master's level Athletic Training program
- Addition of master's level Vocational Rehabilitation program
- Addition of bachelor's degree in Emergency Medical Systems Management
- Expansion of Physician Assistant program from bachelor's to master's degree
- Relocation of Department of Communication Disorders from Texas Tech campus to TTUSHC. The program, established in 1928, officially became part of TTUHSC in 1993.
- Relocation of Odessa programs to permanent TTUHSC facility
- Approval of Clinical Doctorate in Audiology

2001

- Relocation of Amarillo programs to permanent TTUHSC facility
- Completion of Physician Assistant program permanent facility
- Approval of Center for Brain Mapping and Cortical Studies

2002

- Approval / addition of nation's first master's degree in Molecular Pathology
- Approval / addition of master's degree in Rehabilitation Sciences
- Approval / addition of bachelor's degree in Clinical Support Services Management
- Approval of Center for Rehabilitation Assessment

2003

- Approval of name change to School of Allied Health Sciences
- Name changes from Department of Diagnostic and Primary Care to Department of Laboratory Sciences and Primary Care
- Name changes from Department of Communication Disorders to Department of Speech, Language and Hearing Sciences

2004

- Approval / addition of doctorate degree in Communication Sciences and Disorders
- Approval / addition of bachelor's degree in Health Sciences
- Approval of program name change from Vocational Rehabilitation to Rehabilitation Counseling
- Approval of program name change from Clinical Support Services Management to Clinical Services Management
- Approval of program name change from Master Science Rehabilitation Sciences to Clinical Practice Management

2005

- Approval / addition of Department of Clinic Administration and Rehabilitation Counseling

2007

- Expansion of Physical Therapy Program from master to clinical entry-level doctorate



<<< Concept maps help nursing students learn to synthesize data relevant to the patient's health status, preparing them for clinical decision-making in the complex health care environment.

Almost a decade ago, the Institute of Medicine called for a *safer health system* after finding that at least *44,000 people* and possibly as many as *98,000 people* die in hospitals each year as a result of *medical errors*.



Neil Wolf, R.N., CCRN, sits attentively next to his patient. His eyes focus on the two screens by her side that monitor her respiration and heart rate. He is all too familiar with the circumstances that can put a patient's health at risk.

"In an emergency you may have anywhere from three to five people in close proximity giving orders for one patient," explains Wolf, a nurse in the Cardiac Intensive Care Unit at University Medical Center. "To take every precaution necessary for every procedure we do requires an overwhelming number of steps."

Take for example the number of medications he might administer during one shift. "It's fair to say that any patient on any given day gets between five and 15 medications," he said. "Consider that on average each nurse cares for about two patients per nurse, sometimes three. Add to that, the physician's rounds, new orders, assessments, invasive lines ... the potential for errors increases exponentially."

Almost a decade ago, the Institute of Medicine called for a safer health system after finding that at least 44,000 people and possibly as many as 98,000 people die in hospitals each year as a result of medical errors. A recent example of a mistake was an accidental overdose of heparin given to Dennis Quaid's newborn twins. The infants survived, but not everyone is so fortunate. In 2006, a similar medical mistake killed three premature babies in Indiana.

Naturally, patients and their families want answers when such mistakes occur, but placing blame only discourages people from reporting errors, says Cynthia Raehl, Pharm.D., FASHP, FCCP, department chair of Pharmacy Practice in the School of Pharmacy at Amarillo. "We must look further than the surface and ask ourselves what went wrong at multiple stages."

Perfecting the process of patient safety begins early in the educational career. First-year students in the School of Pharmacy spend the initial two weeks of class learning patient counseling skills. In the School of Nursing, students practice their skills in the Clinical Simulation Center, which serves as a real-world laboratory. Last fall, University Medical Center Health System in Lubbock initiated a patient safety program, which included establishment of an endowed chair in patient safety within the School of Nursing, the first nationwide for a nursing school. National research expert in patient safety Rod Hicks, R.N., Ph.D., FNP-BC, (SON '87, '93), was named to



the position in January. He agrees with Raehl that the key to preventing medical errors is to understand how they happen.

“Patients are at risk in hospitals because hospitals are such complex systems,” he says. Also, the sheer number of medications on the market at any given time presents a challenge, and that is compounded by the variety of ways to administer medications and the number of health care professionals working to care for the patient.

A national study released in April co-authored by Hicks reveals nearly 26,000 medication errors from 2003 to 2006 involving nearly 1,500 different products can be attributed to prescription drugs that look or sound alike.

“We have estimates that when a person is in the hospital they could expect one medication error per day,” he said. “It takes an average of 27 processes to get health care treatment to a patient. This leaves 27 opportunities for something to go wrong.”

The educational role of training better-skilled health care providers is key in reducing medical errors. Previous research at Harvard indicates that simulation provides a safe learning environment for students. Results of that study reveal that patients cared for by residents with simulation setting training had shorter operating room times, less damage to the surrounding tissue and a quicker recovery rate.

As governing agencies begin to require simulated training and as simulation centers become more common, Suzanne Escudier, M.D., assistant professor and simulation program director in the School of Medicine’s Department

of Anesthesiology, believes this type of hands-on training will need to become more accessible.

“No one wants to be a provider’s first IV stick or receive their first prescription,” said Escudier. “Most health care providers care and want to do the best they can for their patient.”

Texas Tech University Health Sciences Center has plans to create an interdisciplinary simulation center to allow health care providers from various disciplines to train together. Escudier, who is a member of the TTUHC Interdisciplinary Simulation Center Advisory Committee and is currently conducting simulations with medical students and residents using advanced patient simulators, says an expanded facility would provide more opportunities for interdisciplinary instruction.

In the meantime, Wolfe has a patient to care for while others are looking for ways to prevent all medical errors. The key, he says, is to understand not only the nuts and bolts of medicine, but also the concept of why you are doing what you are doing. “Nursing and medicine are an art, of which you become a master only through practicing.” **P**

“Nursing and medicine are an art, of which you become a master only through practicing.”



finish th

NCAA track champion Sally Kipyego has amassed a gallery of medals but the prize she desires now is her nursing degree.

Hear palpitating against the chest wall of her 5-foot 4-inch, 105-pound well-toned body, Sally Kipyego stands poised, anticipating the familiar shot signaling the start of the race.

She has already said the prayer – the same one she prays before the start of every race – thanking God for blessing her with another day and another opportunity to race ... asking him for strength to finish the task before her ... to keep her safe from injury and that her efforts bring him honor and glory.



e race

by danette baker



“If there would have been someone – just someone who could have helped, things would have been different,” Kipyego said. “I want to be that someone.”

Seven years ago, 14-year-old Kipyego ran her first race ... barefoot against seasoned runners from her high school, Moi Kapcherop Girls High in Marakwet, Kenya (Rift Valley area in East Africa). She was pleased with her fifth-place finish, considering it was the first time she had run competitively and most of the other girls competed in shoes. That race led to others, and eventually a top 10 finish for her in the 2001 World Junior Cross Country Championships in Belgium.

Running, she realized was the ticket to her dream – an American education and better way of life. She was offered a track scholarship to South Plains College in 2004, and then transferred to Texas Tech in 2006. Almost overnight, she became an NCAA superstar.

Competition, which has become a way of life, took on a whole new meaning last July for the East African. Too nervous to even open the envelope – the one containing her acceptance letter to TTUHSC School of Nursing’s undergraduate degree program – Kipyego handed it to her boyfriend and hid her face waiting for his reaction.

Now, she could finish her race.

East Africa is among the lowest socioeconomic areas of the world, but it ranks at the top in producing world-class distance runners. The opportunities that come with running lift many out of poverty — four-time Olympic gold medalist Kipchoge (“Kip”) Keino and Lucas Sang (1988 Seoul Olympics) are but two examples. Two of Kipyego’s three older brothers run professionally, and being the youngest in line behind them, gave her a desire to follow suit. Her three sisters, much older than Kipyego, had married at young ages and moved away from their home village. Kipyego became the only one to graduate from high school.

There are other childhood memories — ones not as pleasant — tainted by the constant illness and stress suffered by Kipyego’s mom, a widowed woman raising seven children (Kipyego’s father died when she was 4). Health care was almost non-existent in their village and medications expensive. As a result, she watched helplessly as a childhood friend died from injuries sustained in a bicycle accident.

“If there would have been someone – just someone who could have helped, things would have been different,” Kipyego said. “I want to be that someone.”

Perseverance will prevail, say those who know her best. “Her passion for nursing is as strong as that of her running,” said Jon Murray, her Texas Tech cross country coach.

“She wants them both and will do whatever necessary to make that happen,” said Elaine Hillin, R.N., M.S.N., academic instructor in the School of Nursing who taught Kipyego this spring in the beginning medical-surgical clinical rotation. “She has all the demands of the nursing course load and all the demands in her extracurricular activity but she never seems stressed or anxious. She has such a desire to succeed in both areas that to her there is no option but to make it work. When I’ve asked her how she balances it all, she just shrugs, smiles and says, ‘I just do what I need to do today.’”

Kipyego’s weekly schedule makes you feel as if you are the one who just ran the 10,000M. On Tuesdays this spring, her day started at 6:30 a.m. when she reported for clinicals at University Medical Center. The day before, however, she would have spent about five hours prep time to learn about the patient she would care for in addition to attending a nursing class and mandatory online discussion as well as track workouts. After Tuesday clinicals, Kipyego would meet with Hillin and classmates until about 3:30 p.m. in a debriefing of sorts, and then it was off to practice where she would run a minimum of six miles.

The stress of an academic load can be overwhelming for student athletes, said Murray. “The nursing degree is one that requires more outside work than the average degree which is why few track athletes study nursing. The School of Nursing has been extremely helpful and considerate in this situation.”

Knowing Kipyego has reached eligibility limits for outdoor competition, national athletic brands such as Nike and Reebok have already come courting. “My brother Chris told me, ‘An education is what you went for ... that’s the prize, don’t leave without it,’” Kipyego counters. “I have to finish school first. This is my time, my opportunity.”

After all, she came to America with a purpose to make life better for herself and for those she left behind. **P**



TTU | ALYSSA SCHUKAR



TTU | BOB SOLORIO



TTU | ALYSSA SCHUKAR

A Quick Look At Kipyego

Sally Kipyego plans to compete in July for a spot on the coveted Kenyan Olympic team. Last year, she was the 10th best Kenyan woman in the 10,000 meters. “She will have to finish at the top of her game, in the top three, to make the team, but it’s possible,” said Jon Murray, Texas Tech’s head cross country coach.

Kipyego plans to graduate from the School of Nursing in 2009, and then compete professionally as a runner, probably in Europe, before beginning a career in nursing or returning to further her nursing education.

“Sally has a great future as a professional runner; but she also has a passion for nursing,” said Murray. “That’s been her drive to get through the tough, busy times. ... She will be as successful practicing nursing as she has been running.”

Career Highlights:

- First Kenyan woman to win an NCAA cross country individual championship (2004); won her second title in 2007, setting new course record at 18 seconds faster than the previous time
- Two-time recipient of the Honda Sports Award, given to the top U.S. female cross-country athlete
- One of only seven women in NCAA history to win four individual track titles during a single season
- Big 12 record holder in the indoor mile and 3K
- Texas Tech school record holder in the indoor mile, 3K, 5K and distance medley relay and outdoor 5K and 10K
- Holds school record in the 5000M
- Has fastest time for women in the NCAA for the 10K
- Six-time NCAA National Champion; seven-time NJCAA National Champion
- Nine-time Big 12 Champion
- Named Women’s Track Athlete of the Year by the U.S. Track and Field and Cross Country Coaches Association



Man with a Plan

ROD HICKS, R.N., PH.D., (SON '87, '93) realized he had big shoes to fill trying to pay forward the financial support he received as a student. According to his calculations, every scholarship he received while earning undergraduate and graduate degrees equaled about 100 hours extra he could devote to studies instead of having to work.

His simple three-step plan helps ensure the education of Red Raider nurses for a lifetime and beyond.

Give a little, but give now. Immediately after completing the nurse practitioner program, Hicks began contributing to its scholarship fund. Upon graduating, he initiated an annual gift to the school, which he continues today. Through his contributions and those from many others, the fund has reached an endowed level and supports one \$2,000 scholarship annually.

Give a gift that keeps on giving. Through planned giving, Hicks has donated a portion of his estate to advance the School of Nursing mission at the Permian Basin and in Lubbock, marking the largest planned gift for the school to date.

Give regularly. Hicks initiated monthly payroll deductions when he joined the Texas Tech University Health Sciences Center in January as the University Medical Center Health System Chair in Patient Safety.

“We can give time or money, both are equally important. I’ve chosen to give financially because I know firsthand the impact of alleviating the financial burden of an education – that’s how I got where I am today.”

Inspired?

For more information regarding financial support for TTUHSC, please contact:

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[HTTP://GIVING.TTUHSC.EDU](http://giving.ttuhscc.edu)

Discoveries

RESEARCH
& SCHOLARLY
ACTIVITY

INVESTIGATIONS

Female factors, auditory abilities, bone health, successful aging, treating melanoma

CURRICULUM VITAE

Kendra Rumbaugh, Ph.D., is recognized as an expert in the role of quorum signaling and biofilms in bacterial pathogenesis.

LONG-TERM EFFECTS OF BINGE DRINKING

TTUHSC and TTU scientists collaborate on research to determine the long-term impact of binge drinking.



BEVERLY CHILTON, PH.D.

TONJA HAGY

FACTS ABOUT FEMALE FACTORS

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Women do not need reproductive tracts to survive, but the human race does. In the United States, ovarian cancer is the fifth most common cancer, and women diagnosed with this disease usually die within five years. Additionally, infertility affects 11 percent of all women of reproductive age. Time lost from work and related medical treatments cost society in excess of \$2 billion annually.

Beverly Chilton, Ph.D., and co-investigators are studying how proteins, gene products known as transcription factors, regulate the expression of target genes in the female reproductive tract leading to normal and abnormal function. Chilton's molecular endocrinology lab focuses on the importance of a particular transcription factor, RUSH/SMARCA3/HLTF, in the cross-talk between the female hormones, progesterone and prolactin in regulating gene expression.

The human genome cloning initiative has revealed that humans are composed of 25,000 to 40,000 genes, which are in turn composed of modules assembled into different yet related "alternatively spliced" products. Disease states in the female reproductive tract result from mutations made during the assembly events. Chilton and her team are working to provide basic facts about the alternatively spliced RUSH/SMARCA3/HLTF transcription factors and their importance to reproductive health.

Beverly Chilton, Ph.D., is regional director of the Laura W. Bush Institute for Women's Health at Lubbock and is professor of cell biology and biochemistry in the Graduate School of Biomedical Sciences. Her research has been funded for 25 years by the National Institutes of Health.

BODY ARMOR

SCHOOL OF PHARMACY



NEAL HINKLE

MAJID MORIDANI, PHARM. D., PH.D.

In the United States, 60,000 new cases of melanoma are diagnosed annually, and one in 70 Americans could develop this form of skin cancer in their lifetime.

Fortunately, according to Majid Moridani, Pharm.D., Ph.D., not all forms of melanoma are life-threatening. With a two-year grant from the National Institutes of Health, he and his research team are working on new drugs designed to help the thousands of patients who do receive this diagnosis.

"Current chemotherapy only works 10 percent to 25 percent of the time in regard to malignant melanoma, which has spread throughout the body," Moridani explained. "In addition to therapeutic failures, today's drug treatments create severe toxicity in the body damaging other tissues and organs, which is considered a limiting factor for a successful cancer therapy."

Moridani and his team are working to develop two different drugs that are more effective toward melanoma cancer, but less toxic to the body and ultimately more targeted to attack the cancer at its source rather than non-cancerous tissues such as the liver and kidneys.

"While I'm very excited to be a part of this research, I cannot emphasize enough the importance of prevention and self-screening," Moridani said. "The likelihood of developing skin cancer is significantly reduced by making sure there isn't over-exposure to the sun's harmful rays by protecting the skin using sunscreen and reapplying frequently."

"It also is important to look for changes in moles and freckles and visit with your doctor as soon as possible for a medical examination; melanoma at the early stage of its development can be readily treated with great success."

Majid Moridani, Pharm.D., Ph.D., is assistant professor in the Department of Pharmaceutical Sciences at Amarillo and has a joint appointment in the School of Medicine's Department of Pediatrics.



LEIGH ANN REEL, AU.D., CCC-A & CANDACE BOURLAND HICKS, PH.D., CCC-A

ATTENTION CLASS

SCHOOL OF ALLIED HEALTH SCIENCES

Previous studies have shown that children with hearing and learning disabilities can benefit from sound field amplification systems in classrooms. Candace Bourland Hicks, Ph.D., CCC-A and Leigh Ann Reel, Au.D., CCC-A, (SOAHS '05), are investigating the impact of sound field amplification systems on development in children with normal hearing.

The pair placed speakers, which project teachers' voices much like a surround-sound stereo system works with a television, in four first-grade classrooms within the Lubbock Independent School District. Four other first-grade classrooms were used as the control.

During the course of a semester, Hicks and Reel tested students for spelling and selective auditory attention abilities (i.e., listening with background noise) to see how the children's skills developed.

Their findings showed that students with different ethnic/cultural backgrounds differ in how they develop the ability to ignore background noise and focus on the message. These results indicate the language of the background noise, in addition to the potential language exposure of the listener, can affect the development of selective auditory attention.

Previous research on adults and children is not clear as to how language of the back-

ground noise and the language exposure of the listeners affect the ability to understand speech in the presence of background noise. Therefore, Reel and Hicks plan to test adults in order to determine how the mature selective auditory attention system functions before conducting additional research on the development of such skills in children.

Eventually, the duo plans to return to classrooms and use the information gathered to help improve learning environments for all children.

Candace Bourland Hicks, Ph.D., CCC-A is an associate professor in the School of Allied Health Sciences Department of Speech, Language and Hearing Sciences. Leigh Ann Reel, Au.D., CCC-A, (SOAHS '05) is a Ph.D. candidate in the department.

GRASSROOTS SURVEY ON SUCCESSFUL AGING

SCHOOL OF NURSING



TONJA HAGY

CRAIG COOKMAN, R.N., PH.D.

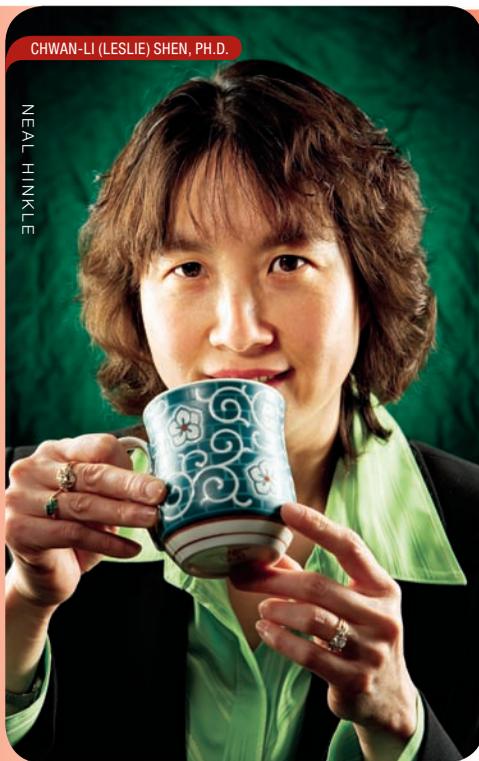
West Texans have long been known for their pioneering spirit and their get-it-done attitude. Undoubtedly, their geographic backgrounds set them apart from those in urban areas, but what impact might it have on their health?

Craig Cookman, R.N., Ph.D., is surveying West Texas seniors to determine if their ideas of successful aging coincide with those of others from across the state. Piggybacking on the state's 2005 Aging Well Indicators Survey, Cookman says his West Texas Aging Project puts a magnifying glass to key issues such as how well seniors are functioning physically and mentally. The results can provide in-depth knowledge about this particular population, which then can be used to better utilize resources and enhance training of health care providers.

"The idea is to develop information that can help us determine what, if any, unique needs West Texans have as they age," Cookman said. "We want to know what is needed to add life to years, not just years to life."

Craig Cookman, R.N., Ph.D., is associate professor in the School of Nursing. The West Texas Aging Project is funded by TTUHSC with support from the Area Agencies on Aging in Abilene, Amarillo, Lubbock, Midland, San Angelo and Wichita Falls.

CHWAN-LI (LESLIE) SHEN, PH.D.



NEAL HINKLE

TEA FOR YOU AND TEA FOR ME

SCHOOL OF MEDICINE

Chwan-Li (Leslie) Shen, Ph.D., has a theory that drinking green tea and adding a low-impact, weight-bearing exercise might be enough to lessen bone loss, a precursor to osteoporosis.

In a human translational study that began this spring, Shen is conducting landmark research to investigate if green tea supplements and tai chi exercise combined would provide greater synergistic benefit to bone health in postmenopausal women with low bone mass. While there are pharmacologic interventions for osteoporosis, Shen says the goal of this research is to intervene in bone loss through behavior modification of diet and exercise.

"Osteoporosis is often a debilitating disease. According to the U.S. Surgeon General, one out of every two women older than 50 will have an osteoporosis-related fracture in their lifetime, with risk of fracture increasing with age," Shen said. "Twenty percent of

senior citizens who suffer a hip fracture die within a year. That is why prevention is so important."

This research is based on her original study of green tea in the animal model, published in the journal *Osteoporosis International* (October 2007). In that research, Shen discovered antioxidants in green tea were promising agents for mitigating bone loss.

She also has conducted research indicating tai chi, an Eastern form of low-impact exercise, is comparable to or even better than resistance training in benefiting bone metabolism in the elderly.

Chwan-Li (Leslie) Shen, Ph.D., is assistant professor of pathology in the School of Medicine. Participants are still needed for her current study, which is funded by the National Center for Complementary and Alternative Medicine, National Institutes of Health.

PULL UP A CHAIR

GET TO KNOW THE RESEARCH FACULTY OF TTUHSC

KENDRA RUMBAUGH, PH.D. GSBS '01

RECOGNIZED AS AN EXPERT IN THE ROLE OF QUORUM SIGNALING AND BIOFILMS IN BACTERIAL PATHOGENESIS

BACTERIAL BARRIERS

Since the late 1990s, I have been studying, along with co-investigators John Griswold, M.D., (Surgery) and Abdul Hamood, Ph.D., (Microbiology and Immunology), communities of bacteria and how they congregate and communicate during the infection process. We were the first to demonstrate that bacteria protect themselves in burn wounds by forming polysaccharide protective cocoons, called biofilms.

This research, published last year as the cover story of the *Journal of Infection and Immunity* led to my current research project, a translational study to determine if biofilms play a role in the chronic infections prevalent in diabetic wounds.

BEGINNING OF AN END

The funding from the American Lung Association that supported my research on bacterial communication and biofilms ended in 2007.

I believe my job as a mentor is to help them answer the question, “What’s the next step?”

Now I’m funded by a three-year grant from the American Diabetes Association. Newer treatment options for diabetics are desperately needed because of the incidence of amputations as a result of chronic infections in diabetic wounds. Up to 50 percent of diabetic patients who have lower extremities amputated die within 18 months following the amputation.

BRIDGING THE GAP

Receiving the first grant from the School of Medicine’s Bridging Program was critical as we neared the end of funding from the lung association, and I had not yet received the diabetes grant. The program provides a means for researchers to sustain projects between extramural funding. With it, I was able to keep my lab

personnel on board and continue my research. It also gave me confidence that the institution felt that my research was worth sustaining.

BALANCING THE WORKING MOM SCALES

As a graduate student, I questioned pursuing a career in academia because I was hard pressed to find a successful female scientist who also was a wife and mother. It really made me take a hard look at whether I was willing to give up those things I wanted in my personal life for my career. My outlook changed while I was a post-doctoral fellow at the University of California in San Francisco. There I had a fabulous mentor who managed to perform world-class science and raise two wonderful children.

I am actually now helping to start a *Women in Science* club at TTUHSC that will focus on these

my Ph.D., and I knew that I wanted them to be involved in my research.

In addition to guiding their research experiences, I believe my job as a mentor is to help them answer the question, “What’s the next step?” Many of the students I’ve mentored are going to medical school, so I want them to see a really successful research model.

Kendra Rumbaugh, Ph.D., has joint appointments as assistant professor in Cell Biology and Biochemistry and Surgery.

**KENDRA RUMBAUGH, PH.D.
(GSBS '01)**

TONJA HAGY

and other challenges women face in science. I also hope it will create an environment for networking and mentoring between students, post-docs, and junior and senior faculty.

THE NEXT GENERATION

I’ve been a mentor for about three years with Texas Tech University’s Howard Hughes Medical Institute Science Education Program and the Honors College. I witnessed the quality of students from these programs who worked in my mentor’s lab when I was working on







I survived binge drinking.

Now what?

By Danette Baker

Binge drinking has its immediate risks — alcohol poisoning, drunk driving, risky social behavior — but scientists at Texas Tech University Health Sciences Center and Texas Tech believe such behavior might leave a lasting impact on memory and cognition long after the hangover.

Young adults nationwide have a drinking problem. Those in West Texas are no different. We're not talking about just an occasional bottle of beer, but instead consuming at least enough alcohol, and often far more, in a two-hour period to be legally drunk.

The story of Jesse Drews makes a poignant statement about the immediate dangers of so-called binge drinking. Drews, a Wisconsin young adult, died March 24 from apparent alcohol poisoning after a binge to celebrate his 21st birthday. His is a worst-case scenario, but what about those who do survive?

Nationwide, 40 percent of college-age students say they engaged in binge drinking at least once in the last month. About one-third say they binge at least once a week. West Texans mirror the national rates, according to statistics from the National Institute on Alcohol Abuse and the Substance Abuse and Mental Health Services Administration, a part of the U.S. Department of Health and Human Services.

Intermittent binge drinking may be common among those college-aged, but information about long-term effects of such

behavior is sketchy, said Gregory Schrimsher, Ph.D., assistant professor in Neuropsychiatry and Behavioral Sciences at TTUHSC. “We don’t really know what’s happening inside the brain during episodes of binge drinking nor how lasting the effects.”

Schrimsher and other scientists from TTUHSC and TTU are looking to answer those questions through an investigation of binge drinking among adolescents and college-age adults. Their research focuses on the immediate and long-term effects on the brain and its ability to function, specifically in regard to areas critical for success in life such as planning and decision-making skills.

“Previous research indicates the younger one begins to binge, the greater impact alcohol will have in their adult lives,” Schrimsher said. “Additionally, we know that the human brain continues to develop well into one’s mid-20s, and some parts of the brain that develop late in adolescents are integral in planning and decision making.”

At the very least, results from their study could make an impact on educating young adults about the risks associated with binge drinking, said Alice Young, Ph.D., who has joint appointments as professor in the Pharmacology and Neuroscience at TTUHSC and Psychology at TTU. Additionally, the pilot data will support continuing research to determine indicators that may put individuals at greater risk to binge, similar to discoveries made about those at risk for alcoholism, she said.

The opportunity for scientists to collaborate on research has several advantages, Young says. “Having parallel tracts (clinical and basic science) in research allows us to ask the bigger question, make greater discoveries, and improves the possibility of moving in the direction (toward NIH funding) much more quickly.”

The binge drinking study is one of four investigations funded through the Research Collaboration Grant program, which the TTU System launched in 2006. University administrators, regents and the chancellor have defined a goal of becoming a Tier I research institution. Securing extramural funding from sources such as the National Institutes of Health is an integral part of the formula, and collaborative research is one step toward that goal. In recent years, the NIH and other federal funding sources have begun to look for interdisciplinary, translational research – significantly enhancing the process in which scientific discoveries become practical applications, said TTUHSC Executive Vice President for Research Douglas Stocco, Ph.D.

“...the younger one begins to binge, the greater impact alcohol will have in their adult lives.”

Research collaborations between basic and clinical scientists are not a novel concept at Texas Tech or other institutions across the state and nation, said TTU Vice President for Research Dean O. Smith, Ph.D. He

added that the grant program was specifically designed to encourage scientists from TTU and TTUHSC to develop translational studies with potential to attract extramural funding.

The binge drinking proposal came from a group of scientists who have worked together for several years through the South Plains Alcohol and Addiction Consortium, says Peter Syapin, Ph.D., professor in Pharmacology and Neuroscience at TTUHSC. In April, School of Medicine Dean Steven Berk, M.D., changed the consortium standing to a research center and named Syapin as its director. Their goal is to train new scientists and apply for funding from the National Institute on Alcohol Abuse and Alcoholism, a division of the NIH.

“Working collectively with researchers from a variety of disciplines, allows you to capitalize on the expertise of each and find as many angles as possible to investigate,” he said. ●

To learn more about those conducting research related to alcohol and addiction, visit <http://www.ttuhsu.edu/centers/spaarc/>

To read about other studies funded, visit:

<http://www.depts.ttu.edu/communications/news/stories/07-12-research-grants.php>
http://www.depts.ttu.edu/vprgs/joint_initiative.php



SOP ABILENE TO LEAD BIOMEDICAL RESEARCH INITIATIVE

:: The School of Pharmacy at Abilene has established its first Center of Excellence, a research center specifically designed to study immunology strategies to detect and treat human diseases.

Under the direction of Associate Professor Jon Weidanz, Ph.D., the Center for Immunotherapeutic Research also will serve as the catalyst for a broader research initiative designed to help scientists commercialize their research. Weidanz brought the school its first commercialized research venture in 2004, Receptor Logic. The company researches antibodies that attack cancerous cells.

In December, the Texas Tech System Board of Regents approved the center, which will eventually employ seven faculty members. Additionally, the center will support several graduate students and post-doctoral fellows.



DALLAS PHARMACY CLASSES MOVE TO NEW LOCATION :: Beginning this fall, the School of Pharmacy in Dallas/Fort Worth will hold classes in a new location at the Southwest Professional Building, 5920 Forest Park Road, near the University of Texas Southwestern Medical Center in central Dallas. The 8,500 square-foot facility will house a 62-seat classroom, faculty offices, case study rooms and research labs. The school will maintain facilities at the Veteran's Administration North Texas Health Care System for offices and case studies.

The Dallas pharmacy program has almost doubled its 2001 enrollment, increasing from 68 to the 130 enrolled in the fall of 2007.

SOP DALLAS PARTNERING WITH OTHER INSTITUTIONS TO MEET RESEARCH NEEDS

:: School of Pharmacy at Dallas has been named part of a multidisciplinary and multidimensional partnership that recently received a \$34 million, five-year Clinical and Translational Science Award from the National Center for Research Resources, which is a part of the National Institutes of Health.

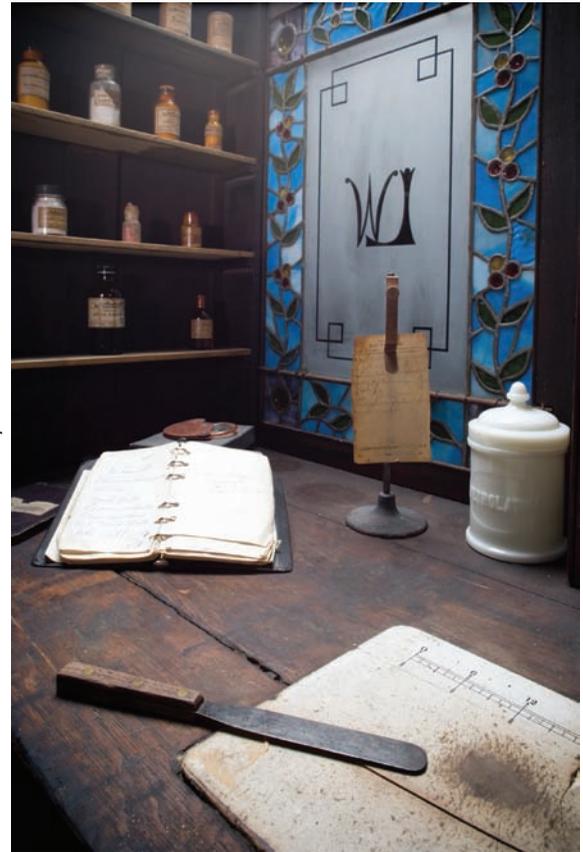
The award is one of 12 given to medical centers throughout the country. The money will be used to transform how clinical and translational research is conducted, ultimately enabling researchers to provide new treatments more efficiently and quickly to patients.

The partnership, known as the North and Central Texas Clinical and Translational Science Initiative, also includes the Texas A&M Health Science Center's Baylor College of Dentistry, University of Texas at Austin School of Nursing, University of North Texas Health Science Center in Fort Worth, University of Texas at Dallas schools of Behavioral and Brain Sciences and Engineering and Computer Science, and the University of Texas Health Science Center at Houston School of Public Health campus in Dallas.

HISTORICAL STANDARDS :: The School of Pharmacy's Texas Pharmacy Museum was selected by the American Association for State and Local History as a pilot site for a one-year national project to set standards for

The museum is one of only six in Texas to be selected and one of only 48 in the country participating in the pilot project.

history museums, historic houses and other historical organizations. Paul Katz, Ph.D., museum curator, will have input into the association's development of materials and resources prior to the project launch.





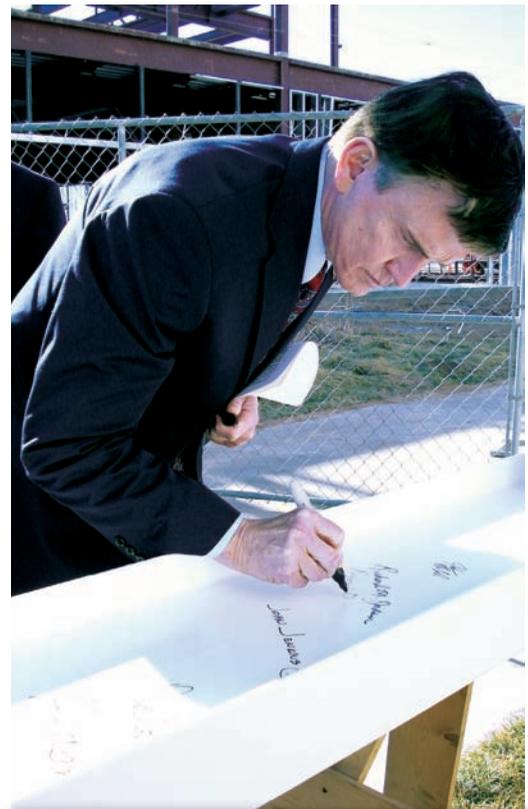
HEART HEALTHY: *The Laura W. Bush Institute for Women's Health was a sponsor for the Go Red Heart Health Awareness Event in February. The event featured various health screenings as well as presentations by Marjorie Jenkins, M.D., executive director of the institute, and Joanna Wilson, D.O., director with the Center for Women's Health and Gender-Based Medicine.*

NEW DIVISION OF GERIATRIC MEDICINE CENTRALIZES AGING SERVICES, PROGRAMS

:: To address the needs of an aging patient population, the School of Medicine at Amarillo has established the Division of Geriatric Medicine to house all current services and programs in geriatrics.

"The division has established an excellent rapport with the community and region for its outreach activities through our Alzheimer's Academy and membership in the non-profit Senior Ambassador Coalition," said Stephanie Leeper, M.D., division chief and Mirick-Meyers Endowed Chair in Geriatric Medicine.

Recent funding from the American Psychiatric Foundation will enable the division to expand services to rural underserved areas, she said. Texas Tech University Health Sciences Center at Amarillo was one of five universities nationwide to receive a Helping Hands grant. Working through the Alzheimer's Academy, the division will provide depression screenings and educational outreach regarding the stigma of dementia and depression.



STEEL SKELETON **::** *A celebratory event commemorating the completion of the new research building's steel skeletal structure was held in January. School of Medicine Regional Dean Richard M. Jordan, M.D., was among those signing the final steel beam. The research facility, scheduled to open in the fall, will provide space for research initiatives in the schools of Pharmacy and Medicine.*

CHEERS TO A SUCCESSFUL ACCREDITATION :: The long-awaited news came Feb. 5 from the Liaison Committee on Medical Education (LCME): The Paul L. Foster School of Medicine has been approved as a four-year medical school.

“Now the real work begins,” said Founding Dean Jose Manuel de la Rosa, M.D., (SOM ‘84) who is charged with recruiting faculty and students. The first class is scheduled to begin in August 2009 with 40 students. Incremental enrollment during the next few years will bring each entering class size to 80 students. During the 2008-2009 academic year, the school will continue to support third- and fourth-year medical students.

El Paso community members joined de la Rosa and other Texas Tech University Health Sciences Center representatives along with Texas Tech System Chancellor Kent Hance, Texas Tech University Health Sciences Center President John Baldwin, M.D., and the Texas Tech System Board of Regents at a reception in late February celebrating the accreditation.



Rebecca Salcido, Human Resources director for the Paul L. Foster School of Medicine, and Rito Torres, associate director, celebrate the school's accreditation.



FIRST NEW RESIDENCY PROGRAM IN 15 YEARS :: This summer four radiology residents will make Texas Tech University Health Sciences Center history as they begin their training at the Paul L. Foster School of Medicine. The new radiology residency program approved this spring by the Accreditation Council for Graduate Medical Education is the first such program for TTUHSC and its first residency program in 15 years.

Graduates will provide interpretation of x-rays, MRIs, and ultrasounds in the El Paso area, helping to relieve a critical physician shortage of radiologists, said Paul L. Foster School of Medicine Founding Dean Jose Manuel de la Rosa, M.D. (SOM ‘84).

Thomason Hospital is investing approximately \$2 million during the next four years to fund the program and an estimated \$20 million for capital equipment.



VIRTUAL REALITY :: Virtual anatomy and simulation labs join generous-sized classrooms in the new Medical Education Building, which opened in late fall following the symbolic ribbon cutting. The facility is the second of three buildings to be completed at the Paul L. Foster School of Medicine. The building features Texas Tech’s familiar Spanish Renaissance style and boasts a decorative medical herb garden in its courtyard. The 125,000 square-foot building cost \$48 million.

NURSING CONSORTIUM ADDRESSES STUDENT APPLICATIONS :: In 2007, more than 11,000 qualified nursing applicants left Texas to attend schools elsewhere. For a state facing a critical nursing shortage, that just won't do, said Sharon Cannon, R.N., Ph.D., regional dean of the School of Nursing at the Permian Basin.

With a \$298,411 grant from the Texas Higher Education Coordinating Board, Cannon will lead a consortium of the state's nursing schools to develop the West Texas Nursing Education Portal Project, a pilot program to keep qualified nursing students in the state. Using a state common college application form, a database will be created to track applicants and match them with schools that have open slots. Similar databases already are used for medical and dental school applicants.

Participating schools formed the West Texas Nursing Education Consortium about a year ago to devise solutions to the nursing shortage. Consortium members are Texas Tech University Health Sciences Center, University of Texas at El Paso, Angelo State University, Midwestern State University, West Texas A&M University, Midland College, Cisco Junior College, El Paso Community College, Odessa College, South Plains College and Vernon College.



MEDICAL STUDENTS COMING TO THE PERMIAN BASIN :: More than 60 first-year medical students have expressed interest in the programs and opportunities that soon will be offered at the Permian Basin campus. Earlier this spring the students met with Regional Dean John Jennings, M.D., and other faculty from the School of Medicine at the Permian Basin.

"We want our medical students to recognize the opportunity for a quality clinical educational experience in the student friendly environment of TTUHSC at the Permian Basin," Jennings said. "Our faculty/student ratio, experienced teaching faculty, and an extremely supportive community are just a few of the advantages for medical students who choose the Permian Basin for their third and fourth years."

In June 2009, the Permian Basin campus will host its first group of third-year medical students. School officials anticipate about 18 students, who have spent their first two years on the Lubbock campus.



GARDEN OF DISTINCTION :: Don't miss the Grover E. and Sally M. Murray Protea Paintings Collection on exhibit now through May 2009 in the upper rotunda of the Texas Tech University Health Sciences Center Administration building. This 33-piece collection, on loan from the University of Texas of the Permian Basin, is part of the 154 floral watercolors by New Zealand artist Zoë Carter. The Proteaceae family is a diverse group of plants native to the southern hemisphere. Grover E. Murray served as president of Texas Tech University from 1966-1976 and was the first president of Texas Tech School of Medicine.



ALZHEIMER'S STUDY TO TEST CANCER DRUG :: The Garrison Institute on Aging Research Division and the Department of Neuropsychiatry will launch a promising clinical drug study this summer that could lead to new treatment for Alzheimer's disease.

The innovative trial will utilize an FDA-approved drug that was developed for cancer treatment. Researchers believe that a pharmacologic blockade of angiogenic (creation of new blood vessels) signaling in the brain will improve memory in patients with Alzheimer's. Exciting preliminary data demonstrates a

Researchers believe that a pharmacologic blockade of angiogenic (creation of new blood vessels) signaling in the brain will improve memory in patients with Alzheimer's.

beneficial effect on memory in an animal model of Alzheimer's.

Randolph Schiffer, M.D., chairman of the Department of Neuropsychiatry, and his staff will run the 12 month clinical trial, which will include about 100 patients.

"The process of discovering and developing new drugs is lengthy and expensive," said Paula Grammas, Ph.D., executive director of the Garrison Institute on Aging. She added that innovative, off-label use of FDA-approved drugs as novel treatments for Alzheimer's disease is a timely and cost-effective strategy.

ANSWERS TO ALZHEIMER'S :: The Garrison Institute on Aging has begun an innovative program to help families of dementia patients and researchers studying dementia-related diseases such as Alzheimer's.

The institute established the Brain Bank Program to provide families of dementia patients with free brain autopsies, the only way to confirm a clinical diagnosis of Alzheimer's and other dementia-related diseases. Additionally, the program supports research by qualified scientists by making brain tissue available for their studies.

To date, the GIA Brain Bank has 20 brain tissue donors, double the number initially expected in the first year, said Terri Stahl, research manager; however, more are needed – from individuals who have had age-related neurodegenerative diseases and those without.

For more information about the program or specific sponsor opportunities, contact Terri Stahl at (806) 743-3612 or visit <http://www.ttuhsu.edu/centers/aging/giabrainbank.aspx>.





NURSING PROGRAM JOINS TTUHSC AT ABILENE ::

The School of Nursing has partnered with Hendrick Health System to bring its Second Degree accelerated nursing program to the Abilene area beginning this fall. Tim Lancaster, CEO of Hendrick, says the collaboration will give nursing students an additional educational opportunity and will help the health care industry meet the critical nursing shortage in the area.

Through the Second Degree program individuals who have a bachelor's degree in any field can earn a Bachelor's of Science in Nursing in one year. Students in Abilene will gain clinical experience on-site at Hendrick. Up to 20 students will be admitted to the first class. The SON also offers the program in East Texas, primarily in Austin and Marble Falls, and West Texas, primarily in Lubbock and Odessa.

PAIN CENTER RELOCATION ::

The International Pain Center will relocate in June from its southwest location to the Health Sciences Center campus. The newly constructed 12,700 square-foot facility, located next to the Texas Tech Physicians Medical Pavilion, will house an ambulatory care center and an ambulatory surgical center. Patients from across the world are referred to center experts, who are internationally recognized among their peers as innovators of approaches to treat acute and chronic pain. Physicians worldwide come to the center annually for training.



REUSS TO LEAD GSBS :: NIH-funded researcher Luis Reuss, M.D., has been named dean of the Graduate School of Biomedical Sciences. He has served as chairman of the Department of Physiology since joining the Health Sciences Center in April 2007 and will continue in that position as well.

Reuss has appointed three associate deans: Thomas Abbruscato, Ph.D., associate professor, Pharmaceutical Sciences; Michael Blanton, Ph.D., associate professor, Pharmacology and Neuroscience; and Afzal Siddiqui, M.Phil., Ph.D., associate professor, Microbiology and Immunology and Internal Medicine.

Pulse featured Reuss in the winter 2007 issue. Read the interview online at: www.ttuhscc.edu/communications/pulse/winter07.pdf.

18-Month-Old Lubbock girl loves to read

At 18 months, Elizabeth Barrett finds everything and everybody immensely interesting. She also delights in reading and deciphering multisyllable words such as “elevator.”

Speech therapists Michael and Katy Barrett, (SOAHS '98, '00) discovered their daughter was able to read words at 13 months old. “Elizabeth and I were in the store, and she was holding a box of cereal,” Katy said. “I heard her saying, ‘Corn,’ and saw her signing the word. I expected there to be a picture of an ear of corn on the box, so no big deal. But there wasn’t a picture. There was only the word.”

Katy didn’t immediately pursue the matter, but when Michael came home from work, they wrote about a dozen words that they knew Elizabeth had seen either in her story books or on “Signing Time,” a PBS show that teaches children sign language.

Michael recalls, “The first word I wrote for her was baby. As soon as I held it up,

she looked at it and she just signed it and said, ‘Baby.’ She understood that relationship immediately.”

Elizabeth’s story first aired locally in March on the NBC affiliate KCBD. A few weeks later, the Barretts were guests on the Today Show and visited an education specialist in New York. The toddler also made headlines with Jay Leno on the Tonight Show.

“It’s never been a forced thing where we are setting her down and saying, ‘You need to do this.’ We have just been really following her lead,” Michael said. Also, the Barretts have consulted local professionals who they say helped them eliminate concerns that Elizabeth’s exceptional abilities might be a splinter skill from a disorder such as autism.

Now, the great game in the Barrett home is to write words, to allow Elizabeth to learn and to see her enjoy figuring them out. “If we were eating a meal, we would

write down what she eats and show her the word,” said Katy.

Most of the words presented to Elizabeth are instantly recognized and pronounced well, also. Her newest word is “elevator,” a little thing she picked up in New York where elevator rides were a special trip.

Elizabeth never seems to tire of learning. From her high chair at dinner time, her mind is still eager. Between bites she suddenly says, “Let’s write words.”

Her parents oblige.

After the serious concentration it takes to read “elevator,” she reads another word she learned in New York City, and pronounces it well:

“Bon-appétit.”

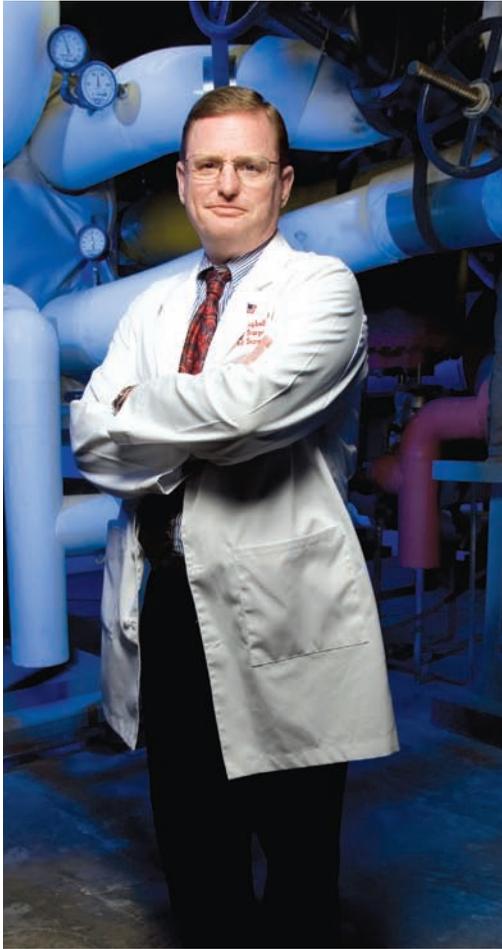
To learn more about Elizabeth’s reading skills, visit www.elizabethreads.com.

Excerpted from an article by Ray Westbrook from the March 19, 2008, edition of the Lubbock Avalanche-Journal; reprinted with permission.



Elizabeth never seems to tire of learning.

LUBBOCK AVALANCHE-JOURNAL/RAY WESTBROOK



COMING FULL CIRCLE :: Sam Campbell, M.D., (SOM '82, Resident '87) says his life truly has come full circle with his return in January to Texas Tech University Health Sciences Center School of Medicine.

Campbell was catching up on some back issues of his vascular journals this fall when he stumbled across an employment add for a vascular surgeon at TTUHSC. He applied and was hired by Department of Surgery Chair John Griswold, M.D., (Resident '86) bringing him back to his hometown.

"I was excited to have been given the opportunity to come here and teach medical students and residents and help where there was a shortage in vascular surgery," said Campbell. "This is what I have always wanted to do."

Campbell says members of his family have always had a special place in their hearts for Texas Tech. His father owned his own trucking business and hauled steel used to build TTUHSC. His oldest daughter was born prematurely at University Medical Center in 1982. The family's experience with UMC, the doctors, fellow Texas Tech alumni, nurses and the graduating class that year made it one Campbell says he has not forgotten.

TWO RED RAIDER NURSES TO BE INDUCTED AS FELLOWS

:: Two nursing alumni will be inducted as fellows of the Academy of Nurse Practitioners in June in Washington, D.C.

Rod Hicks, R.N., Ph.D., (SON '87, '93) professor in the School of Nursing and the UMC Endowed Chair for Patient Safety and Janet Noles, Ph.D., (SON '94) dean at the Patty Hanks Shelton School of Nursing in Abilene, are two of the 23 new inductees.

The academy recognizes as fellows the nurse practitioner leaders who have made outstanding contributions to health care.



Tammy D. Ream, died Jan. 25, 2008, in Midland. Ream was the associate director of the School of Allied Health

Sciences Physician Assistant Program in Midland. Memorials may be made to the Tammy D. Ream Endowed Memorial Scholarship for Physician Assistant Studies.

Melvin A. Golden, M.D., died Nov. 13, 2007, in Boston, Mass. He was a clinical associate professor in the School of Medicine's Department of Radiology in 1973 and then again from May 1996 to August 2003.

William Gordon McGee, M.D., died April 6, 2008 in Dallas. He was a member of the Texas Tech University Board of Regents from April 1985 to January 1991, serving as vice chairman from January 1989 to December 1990. McGee was a pathologist at the School of Medicine in El Paso and was key in pioneering early attempts to establish a four-year medical school in El Paso.

Gifts in memory of or in honor of are routed to the desired location of the donor through the TTUHSC Office of Institutional Advancement, 3601 4th Street, Stop 6238, Lubbock, Texas 79430.



Get connected...

These future alums joined the TTUHSC online community at a recent launch event for students.

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friends we'll miss



**CYNTHIA
JUMPER**

MD
SOM '88, RESIDENT '91

PASSION, PURPOSE, PLACE

BY REBECCA HARDIN

A first generation college graduate, CYNTHIA JUMPER, M.D. (SOM '88, RESIDENT '91) knew she wanted to get an education in health care. She was working on her master's degree in nursing at West Texas State University (now West Texas A&M University) when one of her professors encouraged her to consider medical school.

Jumper believes it takes only a second for someone to make a lasting impact on one's life. "I knew I wanted to be in health care, but I never had the vision, or anyone to mentor or encourage me to further my education along that line," she said. "(TTUHSC) has fostered my career, mentored me, and has spent a lot of time and energy in developing me into an academician and leader in the medical school."

Recently appointed as chair for the Department of Internal Medicine at Texas Tech University Health Sciences Center, Jumper is one of only eight women who hold such positions in the 123 academic Internal Medicine departments in the United States.

While she is interested in all aspects of medicine, her training is in pulmonary/critical care; Jumper says her particular research focus is in lung cancer. With the help of other School of Medicine faculty, Jumper has been involved in several areas of care for lung cancer patients. She has developed a multidisciplinary lung cancer clinic at the Health Sciences Center.

As an alumni and a department chair, Jumper encourages and mentors students on recognizing the importance of Texas Tech University Health Sciences Center.

"Lubbock is my home, Texas Tech is my passion, and I live by that at all times."

CHAD STROWMATT
OT-CDRS
SOAHS '87

IN THE DRIVER'S SEAT

BY REBECCA HARDIN

Imagine for a minute that you were physically unable to drive an ordinary car: you can't reach the pedals; the wheel is too big; you can't see over the dash.

For many, this is reality, and CHAD STROWMATT, OT-CDRS, (SOAHS '87) is changing that reality for his patients.

With 20 years experience, Strowmatt is one of about 500 certified driver rehabilitation specialists in the world. While his niche in occupational therapy is rare, Strowmatt says his expertise is in high demand with the aging population. Each day he helps people become more independent while keeping public safety at the forefront.

The owner of Strowmatt Rehabilitation Services, he spends each day in his Houston shop customizing one of five specially designed vehicles to meet the unique needs of that day's patients. Strowmatt is able to adjust pedals, change out steering wheel sizes and format his vehicles to take voice commands. He then coaches people with a variety of disabilities and challenges to operate the modified vehicles.

Strowmatt says the circumstances his clients face can make driving a new experience. Those who drove in an unmodified car before must adjust to the customized equipment. Others may have never ridden a bike or developed the skills that help people learn to drive. They may have mastered a joystick and a wheelchair at 4 to 6 mph, but not a steering wheel and a car going 45 mph or faster.

In addition to training patients to drive modified vehicles, Strowmatt also evaluates clients to determine if they can safely operate a vehicle, what situations they may want or need to avoid, and available transportation alternatives.

ERIN JANSSEN

RN, BSN

SON '06

LEAP OF FAITH

BY REBECCA HARDIN

ERIN JANSSEN, R.N., B.S.N., (SON '06) came to the Texas Tech University Health Sciences Center School of Nursing and Lubbock with little knowledge of the community and a healthy dose of faith.

"My knowledge of Lubbock consisted of the fact that my father went quail hunting there every year, and that they had a good nursing school," said Janssen. "But I had faith that it's where God wanted me to be at that time in my life."

Janssen's grade school projects illustrate her desire to be a nurse as early as the first grade. After completing prerequisite work at Texas Women's University in Denton, Janssen was accepted to nursing school at Texas Tech University Health Sciences Center.

While at TTUHSC, Janssen worked at University Medical Center as a nurse tech. Her work and educational experience have given her the skills to become a successful nurse in labor and delivery at Parkland Memorial Hospital in Dallas.

"I feel special in a way that I am able to successfully be a nurse here," Janssen said. Parkland is the busiest maternity hospital in the United States and second busiest in the world. Janssen says she not only enjoys the fast-paced environment but also being able to be a part of such a special time in the patients' lives.

CHRIS SCHWAB
 PH.D.
 GSBS '02

SCIENTIFIC EXPERTISE

BY JEANNE GUERRA

CHRIS SCHWAB, PH.D., (GSBS '02) credits Texas Tech University Health Sciences Center with providing the skills necessary for him to be successful in the job he loves. "I gained strong scientific knowledge, research, presentation skills and inductive reasoning proficiency," and they combine to make one happy medical science liaison for Centocor Ortho Biotech Services.

Simply put, it means that Schwab works directly with health care providers in hospitals, clinics, nursing homes and assisted-living facilities to help improve patient care through dissemination of scientific knowledge.

While a student at TTUHSC, Schwab said he learned to present scientific research in a rigorous manner. "I meet with the health care professionals to discuss the clinical benefits and appropriate use of PROCRI[®]," he said. "I am not the salesman or pharmaceutical rep, but the one who represents the clinical side of the company. I assist them in providing a better standard of care to those patients who are helped by the drug."

With Dallas as his base, Schwab serves health care providers in Texas, Oklahoma, New Mexico, Colorado, Arizona, Kansas and Nebraska. He earned his doctorate in Medical Microbiology from the Graduate School of Biomedical Sciences after graduating from Texas Tech with a microbiology degree. He also completed three years of post-doctoral work at the University of New Mexico studying pulmonary immunomodulation and asthma.

Because of his scientific background, Schwab is able to easily relate to other doctors and health care workers. "I talk their language, so I am able to understand their questions and give them scientific answers. It is very rewarding to know that I am helping make a difference in patients' lives."

PERSONALIZED SERVICE

BY KIM DAVIS

A self-described lover of the sciences, STEVEN RODRIGUEZ, PHARM.D., (SOP '01) discovered the pharmaceutical industry an easy fit. After his fourth-year rotation at Texas Tech University Health Sciences Center School of Pharmacy at Dallas, he had not only sealed a career, but also found a place to call home.

As owner of MedPro Pharmacy in Melissa, just north of McKinney in the Dallas/Fort Worth area, Rodriguez can be found most every day managing his compounding business where he is able to tailor drug therapies for each individual patient.

"It's a very rewarding experience to be a part of working closely with patients and their physicians to solve individual health issues," Rodriguez said. "The relationships we are able to develop with our patients and community are priceless."

Rodriguez said the most memorable lessons learned while at TTUHSC involved pharmacists working to save health care dollars.

"I truly believe pharmacists can be advocates for helping patients and the health care system," he said. "Texas Tech (University Health Sciences Center) was adamant about that; and I whole-heartedly support that concept."

"Pharmacoeconomics is a major component of health care. Pharmacists are a great resource to help manage drug therapies that will improve patients' lives and reduce overall drug costs."

**STEVEN
RODRIGUEZ**
PHARM D
SOP '01

Thank you

to the donors who have established these endowments from November 2007 through May 2008. These gifts are essential in fulfilling the mission of Texas Tech University Health Sciences Center.

GRANVILLE T. HALL, M.D., CHAIR IN OBSTETRICS AND GYNECOLOGY

F. Marie Hall has established the Granville T. Hall, M.D., Chair in Obstetrics and Gynecology in honor of her father's lifetime commitment to his patients and profession. The chair will be housed in the Laura W. Bush Institute for Women's Health at the Jenna Welch Center in Midland.

FLORENCE THELMA HALL CHAIR FOR NURSING EXCELLENCE IN WOMEN'S HEALTH

F. Marie Hall was the lead donor for a chair established in honor of her mother. The Florence Thelma Hall Chair for Nursing Excellence in Women's Health was established in honor of Ms. Hall's mother who had a lifetime dream of becoming a nurse. This chair is to be a catalyst within the School of Nursing for the development of women's health programs. Other major donors include the Don-Kay-Clay Cash Foundation, Jay and Virginia Crofoot, Shirley Garrison, Chancellor Kent and Susie Hance, Dr. Tom and Nancy Neal, and James and Betsy Sowell.

L. SHANNON HOLLOWAY, M.D., PH.D., ENDOWED CHAIR IN ORTHOPAEDIC SURGERY

Janie Holloway, wife of the late Shannon Holloway, M.D., Ph.D., and friends have established an endowed chair in his memory. Dr. Holloway, a long-time Abilene physician, was the School of Medicine's first orthopaedic resident.

STROKE RECOVERY/APHASIA GROUP THERAPY PROGRAM ENDOWMENT

Lubbock National Bank contributed a lead gift to create the Speech, Language and Hearing Sciences Patient Services Endowment in the School of Allied Health Sciences. An additional gift was given by the TTU College of Engineering students who are members of the American Institute of Chemical Engineering. This endowment will benefit the Stroke Recovery/Aphasia Therapy Program.

JAMES A. "BUDDY" DAVIDSON CHARITABLE FOUNDATION SCHOLARSHIP ENDOWMENTS

The James A. "Buddy" Davidson Charitable Foundation has established endowed scholarships in the School of Nursing at Lubbock and the School of Pharmacy at Abilene.

NATIONAL ASSOCIATION OF FUTURE DOCTORS OF AUDIOLOGY SCHOLARSHIP ENDOWMENT

Students in the School of Allied Health Sciences Audiology program have established the National Association of Future Doctors of Audiology Scholarship Endowment. The students held various fundraisers to secure their donation for this endowment.

TAMMY D. REAM ENDOWED MEMORIAL SCHOLARSHIP FOR PHYSICIAN ASSISTANT STUDIES

Friends, colleagues and students have established a scholarship in memory of Tammy Ream. Ms. Ream, who was associate director of the Texas Tech University Health Sciences Center Physician Assistant Program in Midland, passed away Jan. 25, 2008.

TRIXIE JANSSEN AND ERIN JANSSEN SCHOLARSHIP ENDOWMENT IN NURSING

Erin Janssen, R.N., B.S.N., (SON '06) and her parents, Barry and Nancy Janssen, all of Dallas, have established an endowed scholarship for the School of Nursing in memory of Erin's grandmother, Trixie Janssen, who served as a nurse during World War II. Janssen works in labor and delivery at Parkland Memorial Hospital in Dallas. (see story pg. 36)

As one of the most prestigious gifts made to a university, an endowment helps meet current needs while creating a permanent legacy. Endowments help support scholarships, research, faculty development and capital improvements.

Grow where you are planted

BY KERRY GILBERT

As a University of Texas graduate and native of Austin, moving to Lubbock in 1994 to attend Texas Tech University Health Sciences Center School of Allied Health Sciences was a stretch. I expected to “do my time” in Lubbock and in the school’s Master of Physical Therapy (MPT) Program and quickly return to central Texas to open a physical therapy practice.

Today, I am firmly planted in Lubbock and at TTUHSC with no desire to leave. TTUHSC has been a central catalyst for my professional and

personal growth. In the summer of 1995, I realized my love for teaching while working as a teaching assistant in the gross anatomy course. That same summer, I met the love of my life, Sherry (SOAHS MPT '98). We are now married and blessed with two wonderful children, Kade, 8 and Koryn, 5.

After working at University Medical Center for a few years, I returned to TTUHSC in 1999 as assistant professor in the MPT program. In 2004, I completed my Doctor of Science (Physical Therapy) degree. I took great pride in conducting, defending and publishing my research on nerve displacement and strain related to leg movements. This work

was published in 2007 and received the Young Investigator Award from SPINE.

During the last 13 years, I have been mentored by the best and given many challenging opportunities, including a leadership role as assistant program director and then program director of the MPT program. I have had the privilege to witness a transformation within the MPT program related to changes in the job market, enrollment, licensure scores, and degree/accreditation standards. I believe our faculty and program are stronger than ever before. In the summer, we will admit our first class to the Doctor of Physical Therapy (DPT) degree. The DPT program within the School of Allied Health Sciences is now one of the five state-supported DPT programs in Texas.

My story may seem like that of many others at TTUHSC. But for someone who can link many blessings -- my family and friends, my education, and my career -- to one university, there is no doubt that TTUHSC was divinely placed in my life. I offer thanks to those who have invested in me over the years, and I understand that education brings with it privilege and responsibility.

This year, the School of Allied Health Sciences celebrates its 25th anniversary. I look forward to the next 25 years and the privilege and responsibility of investing in students and faculty the way others have invested in me.

I will continue to grow where I am planted.

Kerry K. Gilbert, PT, ScD, (SOAHS '97, '04) is an assistant professor in the School of Allied Health Sciences and director of its Doctor of Physical Therapy Program.



NEAL HINKLE

Alumni Events

The Office of Alumni Relations and Texas Tech University Health Sciences Center faculty and staff said congratulations to graduating students and connected with alumni at receptions held in April.



1

AMARILLO



2

Amarillo

1. Tyler Street, MD, (SOM '08); Jarrod Wiggins, MD, (SOM '08); and Jason Gipson, MD, (SOM '08)

2. SOAHS Instructor Mike McGalliard, MPT, (SOAHS '97); Jodi Jones (SOAHS '97); and SOAHS Professor Lois Stickley, PhD



3

EL PASO



4

El Paso

3. Ann and David Rachel (SOAHS '87)

4. SON Non-Traditional Undergraduate Department Chair Cathie Collins, PhD (SON '95); Paul L. Foster School of Medicine Associate Dean for Student Affairs Kathryn Horn, MD; SON Dean Alexia Green, PhD; Paul L. Foster School of Medicine Director for Student Affairs Alex Garcia; SON Senior Director Karla Chapman; and Lizette Villanueva (SON '03)



Odessa

5. SON Regional Dean Sharon Cannon, PhD; and SOAHS Regional Dean Tony Domenech, EdD

Lubbock

6. Keri Gardner (SON '08); SON Dean Alexia Green, PhD; and Amanda Davis (SON '08)

ODESSA



5



6

7. SON Academic Instructor Carmen Vela, RN, MSN, (SON '07) and Xavier Vela

8. Michael Mendez, MD, (SOM '08); Justin Tawfik, MD, (SOM '08); SOM Dean Steven Berk, MD; and Mike Capt, MD (SOM '08)

LUBBOCK



7



8

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October 17-18**

2003

1998

1993

1988

1983

1978

Reunion highlights include:

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www.RaiderCheckUp.com/reunion2008

Online registration begins in August



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