All the Right Moves
on the cover

ALL THE RIGHT MOVES
Forty students embrace unconventional education as they embark on an academic adventure at the new Paul L. Foster School of Medicine at El Paso.

AN ANSWER TO ALZHEIMER’S
Sid O’Bryant, Ph.D., searches for new a tool to diagnose Alzheimer’s disease.

OUT OF AFRICA
Chandice Covington, R.N., Ph.D., is taking steps to help prevent mother-to-child HIV in Africa, but her work might also improve health for women worldwide.

LEAGUE OF THEIR OWN
On the diamond, gridiron or in the ring, this team of health care professionals provide a line of defense that keeps the pros in the game.

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Updates

Alumni

Matthew B. Grisham, Ph.D.
GSBS ‘82
Studies underlying factors of tissue damage in chronic inflammatory diseases

Doug Moore, M.H.A., MT (ASCP)
SOAHS ‘91
Behind the scenes in health care delivery

Milinda Miers Morris, M.D.
SOM ‘91
Works to impact women’s health

Larry Thompson, Pharm.D.
SOP ‘05
Dedicated to serving those who serve

Laura Atkins, R.N., B.S.N., M.B.A., CCRN
SON ‘01
Making a difference for patients, future nurses

Get Fit Lubbock

Healthy Living

Get Fit Lubbock, a program of the Garrison Institute on Aging, wrapped up its fifth season in November and the results have TTUHSC and community members well on their way to a healthier lifestyle. To date, participants have logged almost 77,000 hours of exercise and lost more than 9,000 pounds.

Get Fit engages participants in friendly competition built around increasing activities and improving nutrition.

Learn more about this program at www.healthylubbock.org as well as other initiatives of the Garrison Institute on Aging at www.ttuhsc.edu/aging.

We Want to Hear From You!

Is there a place on our campuses that remains special to you? Perhaps you know of a classmate that has an interesting hobby or an accomplished career. We welcome your feedback and value the opportunity to connect the TTUHSC community. Submissions may be edited for clarity, style and length.

Send your submissions to:
Pulse, Editor
Texas Tech University Health Sciences Center
3601 Fourth St., STOP 6235
Lubbock, Texas 79423

Or E-mail: danette.baker@ttuhsc.edu

Please include your full name, graduation year (if alumnus/a), E-mail and mailing address.
AND DREAMS BECOME REALITY

BY JOSE MANUEL DE LA ROSA, M.D. (SOM ’84)
Founding Dean, Paul L. Foster School of Medicine

A decade ago an idea emerged — a four-year medical school for El Paso. At that point, we were one of three regional campuses comprising the Texas Tech University Health Sciences Center School of Medicine. Medical students completing their final two years in El Paso received intensive training as they rotated throughout our medical clinics and teaching hospital. Our location — about a mile away from the international bridge separating the United States and Mexico — gave students an environment that tested their reasons for becoming doctors. We were fertile ground for training students about emerging diseases, third world conditions, and a culture stemming from the United States’ largest minority group. It was clear that we had an opportunity and obligation to think big. So we did.

A movement swept through the community. I’m still amazed that so many joined forces because they believed so fervently in this dream. And whenever a bump in the road appeared, gears shifted and everyone continued moving forward … for 10 years. From the abuelita (grandma) who donated a portion of her monthly check to the game-shifting $50 million donation – the support never lagged.

On Aug. 1, 2009, the first class of the TTUHSC Paul L. Foster School of Medicine was formally introduced to its community at the White Coat Ceremony. As our first 40 students stood on stage at the legendary Plaza Theatre donning their white coats, I wondered if they realized that they would forever symbolize a significant era in El Paso’s history.

Today, I live the dream. I witness the growth of these future doctors as they attend lectures, participate in labs and fret over exams. And I realize that they too had a dream that brought them here. The Class of 2013 was a marker of success for many of us. The reality is that this school and these students represent what can happen when you dare to think big.
GAME ON

IN FEBRUARY, THE WORLD WILL BE WATCHING VANCOUVER AS THE WINTER 2010 GAMES BEGIN. ALLIED HEALTH SCIENCES STUDENT KRISTIN KING WRIGHT KNOWS FIRSTHAND WHAT IT TAKES TO BE AN OLYMPIAN. By Doug Hensley

A short conversation with Kristin King Wright reveals one thing: She has the mettle to accomplish whatever she sets her mind to — and the medal.

Wright, who began the Master of Athletic Training program in May, would like nothing better than a chance to return to the Olympics — not as a competitor; she’s already done that — but as a health professional.

“I want to work in the atmosphere of elite athletes,” she said. “I remember the trainer who took great care of me, and I’d like to give back in that area.”

Wright was a member of the U.S. Women’s National Hockey team that finished third at the 2006 Winter Olympics in Torino, Italy. So the bar is pretty high when it comes to the future.

“I have changed my mind frequently, and right now I have dreams of having a family,” said Wright, who married her husband, Jeremy, in May. “At first, I thought about professional sports, but that requires a serious time commitment.”

For now, she’s considering beginning her career in a clinical setting, while contracting with high school sports teams. Eventually she hopes to work with the U.S. Women’s Hockey team as well.

“They (professional teams) go to some tournaments and have camps leading up those tournaments,” she said. “Right now, they have someone who works with them full time, and they send a different person to the tournament. I’d like to get in that area and maybe work specifically in strength, conditioning and rehab.”

That is still a ways off. Wright, who earned an undergraduate degree in sociology from Dartmouth, said she’s happy to be part of the TTUHSC program.

“I looked at about four schools when I was applying to grad schools,” she said. “I went to three of the four and visited with professors and directors. When I talked to Dr. (Michael) Smith and Dr. (LesLee) Taylor and professor (Troy) Hooper, I got a sense that they were really passionate about the profession.

“That really excited me about coming to Tech. This is where I thought I would learn best, and so far it has lived up to my expectations.”
In the Summer 2009 PULSE, we told you about a group of medical students working to establish a free student-run clinic in Lubbock.

After months of planning, the TTUHSC/Lubbock IMPACT Free Clinic is now open every Wednesday from 6 to 9 p.m. at Family Church on 34th Street. The clinic is a collaborative effort of TTUHSC, Lubbock IMPACT Inc. and Lubbock Ambulance.

Under the guidance of Medical Director Kelly Bennett, M.D., and Assistant Medical Director Fiona Prabhu, M.D., a handful of volunteer TTUHSC physicians and 10 to 12 medical students including Brian Mahmood, Revathi Ravi and Carlos Ortiz, second-year, and Sudha Bhadriraju and Peter Wu, third-year. They serve 15 to 20 uninsured Lubbock residents each week.

“We see typical things that are seen in a primary or family medicine clinic,” Mahmood said. “Colds, sore throats, respiratory complaints, body aches and pains ... routine health check-ups and physicals for those who haven’t seen a doctor in years.”

In the future, Mahmood said he hopes to recruit additional volunteer students and physicians to volunteer at the clinic to expand services.
Long before Red Bull became a household name, this School of Medicine faculty member was consumed with one of its ingredients. Can you Guess Who?

RURAL HEALTH EDUCATION SCHOLAR APPOINTED AS STUDENT REGENT ::

Entering his second year of medical school, Kyle Miller took on a new challenge — one that has already opened his eyes to the big picture of higher education.

Miller, a native of Plainview, Texas, was appointed by Gov. Rick Perry to serve as the third Student Regent for the TTU System. He will represent the more than 40,000 students enrolled at TTU, TTUHSC and Angelo State University. Miller is the second regent from TTUHSC.

“This has been an interesting opportunity to gain leadership experience. You just don’t realize how much work goes on behind the scenes,” he said.

Miller is in the joint MD/MBA program and is a Texas Tech Rural Health Scholar. He knows that as a health care professional, he will have many opportunities in the future not only in direct patient care but also by being involved in identifying community needs and having a voice in developing policy. The regent opportunity, he said, will help him to better understand how he can be involved in the larger health care arena.

RWJ FOUNDATION PROVIDES NURSING SCHOLARSHIPS ::

The Anita Thigpen Perry School of Nursing has received $300,000 from the Robert Wood Johnson Foundation’s New Careers in Nursing Scholarship Program. This national initiative aims to help alleviate the nation’s nursing shortage and increase the diversity of nursing professionals.

The grant will provide 30 scholarships in the amount of $10,000 each for Perry School of Nursing Second Degree Program students. In 2008, the foundation awarded the school $150,000 for these scholarships.

Award preference is given to students from groups underrepresented in nursing or from disadvantaged backgrounds. Grant funding also will be used by the Perry School of Nursing to help leverage new faculty resources and provide mentoring and leadership development to ensure successful program completion by scholarship recipients.
**411 ON MEDICATION FOR NEW MOMS** :: New and expectant moms will soon have a new resource for ensuring a healthy pregnancy for them and their newborns. The Laura W. Bush Institute for Women’s Health, TTUHSC and Tom Hale, Ph.D., have established the InfantRisk Center, a national call center where information will be readily available regarding the use of medications during pregnancy and breastfeeding.

Nursing School Receives Texas Workforce Commission Grant :: The Texas Workforce Commission awarded the Anita Thigpen Perry School of Nursing a $1 million grant to help research, develop and provide innovative practices for curriculum development and training as well as increase student capacity in nursing schools. The grant was awarded by geographic region and in partnership with Texas A&M Health Science Center (Central Texas), University of Texas at Tyler (East Texas), Texas Woman’s University (Gulf Coast), Dallas/Ft. Worth Hospital Council (North Texas) and University of Texas at El Paso (Upper Rio Grande). Each region has between three and 22 schools participating in the grant.

**ANNUALLY, MORE THAN 4 MILLION WOMEN DELIVER BABIES AND MANY OF THEM BREAST-FEED THEIR INFANTS. MOST OF THESE MOTHERS WILL CONSUME AT LEAST ONE OR MORE MEDICATIONS. TO DATE, THERE ARE LIMITED RESOURCES CONCERNING THE USE OF THESE MEDICATIONS. THIS CENTER WILL ANSWER THIS NEED.**

Hale, professor of pediatrics at the School of Medicine at Amarillo, is the author of *Medications and Mother’s Milk*, the best-selling reference for professionals in this field. Through his research, Hale also has established a database of thousands of drugs and how they impact a pregnancy and the breastfeeding mother.

The center, when fully funded, will be housed in the Laura W. Bush Institute for Women’s Health at Amarillo. You can help support this program by attending the Power of the Purse event.

**NURSING EXPANDS TRADITIONAL BSN PROGRAM** :: The Anita Thigpen Perry School of Nursing has expanded its traditional Bachelor of Science in Nursing program to students in Abilene, El Paso and the Permian Basin. The school will recruit up to 20 undergraduate students on each campus, thus increasing nursing school enrollment. Two faculty members will be assigned to each campus to provide classroom curricula support and simulation education. Students will receive clinical training at hospitals in their respective communities.

**ABILENE RECEIVES DESIGNATION AS ACADEMIC HEALTH CENTER** :: With approval from the Texas Higher Education Coordinating Board, TTUHSC has established Abilene as a Regional Academic Health Center. Previously, Abilene was a satellite campus.

TTUHSC has two schools in Abilene, offering undergraduate and graduate level curriculum. The School of Pharmacy began offering its Doctor of Pharmacy program in January 2006. Two years later, the Anita Thigpen Perry School of Nursing admitted students there to its online accelerated Second-Degree Bachelor of Science in Nursing program. This summer, the school admitted 20 students at Abilene to its traditional BSN program, as part of the program’s expansion.

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*The Community Connections Advisory Board of the Laura W. Bush Institute for Women’s Health will host Power of the Purse, a charity luncheon and designer purse auction, to benefit the institute and the InfantRisk Center. Jenna Bush Hager is scheduled to speak. The event is Feb. 5, 2010, at the Amarillo Civic Center. For more information, contact Gainor Davis at gainor.davis@ttuhsc.edu or 806.354.5546.*
$430,000
Amount raised by the Docs in Training team for the Susan G. Komen Race for the Cure. The team, composed of medical students and their families and friends, had 840 participants. Students from various TTUHSC schools are involved in community activities throughout the year.

15
Number of competitors for third-year medical student and MBA candidate Nina Resetkova, who made it to the final round of ReachMD’s “Next Top Doc.” The college-bowl quiz show posed questions to contestants covering medical school curriculum and latest medical advances.

3,250
Fall enrollment marks highest in TTUHSC history.

57
Ranking received by the School of Allied Health Sciences Physician Assistant program by the U.S. News and World Report for Best Physician Assistant Programs.

18
Third-year medical students comprise the initial class of future physicians who will complete their final two years at the School of Medicine at the Permian Basin. The school expanded to the regional campus this year. Learn more about this first class in PULSE online.

No. 1
The Anita Thigpen Perry School of Nursing earned the top marks in the state for 2008 graduation performance at 96.43 percent and with an NCLEX pass rate of 86.86 percent by the Texas Higher Education Coordinating Board. The school is the second largest producer of BSNs in the state, behind Texas Woman’s University.
By the time Red Bull entered the U.S. market in 1997, Barry Lombardini, Ph.D., had been studying one of the energy drink’s key ingredients for almost 25 years and had been at TTUHSC as long.

He came to Lubbock in the early 1970s — Feb. 13, 1973, to be exact — to teach pharmacology at the new medical school and to pursue his research on taurine, an essential amino acid and touted as giving Red Bull its “umph.” Taurine is naturally produced in mammals, including humans, and is thought to have antioxidant qualities, but Lombardini says, “We’re 40 years into it, and we still don’t know exactly its function.”

In his lab, one of only about a hundred worldwide, Lombardini studies taurine’s effects on calcium metabolism. His work has garnered NIH funding and publication in peer-reviewed journals.

The San Francisco native says Lubbock’s location – halfway between the coasts that he and his wife call home – and the opportunity to help shape a new medical school, made the position at TTUHSC attractive. Like many, Lombardini found the weather and people pleasant, and stayed.

Inside his office one might be quick to assume he’s kept every piece of paper since he began. Reams stacked neatly in piles – on the floor, his desk, and on shelves that line the wall – provide a path for Lombardini to his workspace.

He makes a joke about the seemingly disheveled state, saying it keeps out unwanted visitors. Truth be told though, Lombardini says he doesn’t have students stop by as often as in the school’s early days at Drane Hall. Student offices, located on the floor just above the faculty’s, provided greater convenience for conversation.

“If I came in to work at night, the students would be there studying and would come down for discussions.”

The school’s move to its present location and the increase in class size makes personal communication with the students challenging. Most discussions with students now take place via E-mail; but when he’s scheduled as the first lecture of the day, Lombardini arrives early to take advantage of the opportunity to interact with students face-to-face.

“I’ve always found joy in teaching the students.”
APPPOINTMENTS

ALYCE ASHCRAFT, R.N., PH.D., Anita Thigpen Perry School of Nursing, was recently selected as the associate professor for the Roberts Endowed Practice ship in Gerontological Nursing. Ashcraft leads an interdisciplinary team formed with Carillon Education Foundation conducting research aimed at improving the quality of life of Carillon House residents. She has received multiple grants for improvement of outcomes in nursing home and long-term care.

BARBARA CHERRY, R.N., DNSC, (SON ’97) department chair for Leadership Studies in the Anita Thigpen Perry School of Nursing, has been appointed to the Mildred and Shirley L. Garrison Professorship in Geriatric Nursing. Her work has involved creating local research partnerships focused on geriatrics, developing national networks and submitting grant proposals for the promotion of healthy aging in West Texas.

JOSEPH E. HANCOCK, M.D., associate professor and division chief of gastroenterology, School of Medicine, has been appointed to the editorial board of Gastrointestinal Endoscopy, a leading medical periodical published by the American Society for Gastrointestinal Endoscopy.

STEPHEN W. BORRON, M.D., professor of emergency medicine, Paul L. Foster School of Medicine, has been named medical editor-in-chief of ToxED, an online clinical toxicology reference guide that provides clinicians with access to drug, poison and chemical information at the point-of-care.

Anita Thigpen Perry School of Nursing Regional Dean at El Paso JOSEFINA LUJAN, R.N., PH.D., is one of 20 nurses selected nationwide to the 2009 cohort of the Robert Wood Johnson Foundation Executive Nurse Fellows. The three-year fellowship program provides extensive leadership development for nurses in executive roles.

STEVE URBAN, M.D., associate professor, Department of Internal Medicine at Amarillo, is serving a one-year term as president of the Texas Chapter of the American College of Physicians.

ROD HICKS, R.N., PH.D., (SON ’87, ’93, ’98) was inducted into the American Academy of Nursing as one of the 2009 Fellows. Hicks is professor in the Anita Thigpen Perry School of Nursing and University Medical Center Health System Endowed Chair for Patient Safety.

NOW OPEN :: The Amarillo campus recently celebrated two ribbon cutting ceremonies marking the completion of the School of Medicine’s new Family and Community Medicine clinic and the School of Pharmacy’s new Academic Classroom. The clinic, formerly located at Baptist St. Anthony Hospital, is now on the fifth floor of the School of Medicine Building. The School of Pharmacy’s new academic building will provide space to increase class sizes from 90 to 115 students.
The TTU System Board of Regents has named School of Pharmacy faculty researcher Quentin Smith, Ph.D., as the sixth recipient of the Grover E. Murray Professorship, the highest honor TTUHSC bestows upon its faculty members.

The Board of Regents established the Murray Professorship in 1995 to honor Grover E. Murray, the first president of TTUHSC. Murray professorships are granted to faculty in recognition of the attainment of national and/or international distinction for outstanding research or other creative scholarly achievements.

Smith served as chair and professor for the Department of Pharmaceutical Sciences until Sept. 1, when he was named senior associate dean for Pharmacy Sciences.

His chief research interests are in drug development and delivery to the central nervous system. Smith has written more than 100 journal and book articles and is a fellow of the American Association of Pharmaceutical Sciences. He has also served on numerous grant review panels, the local American Heart Association board and was chief organizer of the Cerebral Vascular Biology 2003 International Symposium.

In 2007, TTUHSC honored Smith as a University Distinguished Professor. He has also received numerous teaching and teaching team awards from the School of Pharmacy and has twice been voted Most Influential Professor by graduating students.

Chiang Maj University Medical School in Chiang Maj, Thailand, recently celebrated its 50th anniversary, and several TTUHSC administrators and faculty members helped mark the occasion.

Since 1991, TTUHSC has participated in a program offered to medical students in Thailand that helps prepare them for the U.S. Medical Licensing Exam, or USMLE. The training is a collaboration between the Thai Physicians Association of America, the Thailand government and TTUHSC.

The program began as a way to assist Thai medical students in qualifying for residencies at U.S. medical schools, including TTUHSC. One positive outcome from the program is the placement of physicians at Bumrungrad International Hospital in Bangkok, which only accepts board certified physicians.

Those traveling to Thailand were School of Medicine Dean Steven Berk, M.D., Tom Tenner Jr., Ph.D., associate dean for Faculty Affairs and Development; Cynthia Jumper, M.D., (SOM ’88, Resident ’91) department chair, Internal Medicine; Suzanne Graham, M.D., associate professor, Department of Pathology; Paul Douthit, Ph.D., associate professor, Department of Pediatrics; David Straus, Ph.D., professor, Department of Microbiology; Panupong Larpanichpoonphol, M.D., assistant professor, Department of Internal Medicine; and Somkid Sridaromont, M.D., clinical professor, Department of Pediatrics.
CHARTing a New Course in Health Care :: More than half of the counties in Texas don’t have a general pediatrician, and in many cases gaining access to pediatric care involves lengthy travel to locations where health care specialists are available. Travel can sometimes be burdensome both financially and in lost work/school time creating expenses that many families simply can’t afford.

Using telemedicine, the F. Marie Hall Institute for Rural and Community Health will help West Texans overcome those challenges. The institute established Project CHART, Children’s Healthcare Access for Rural Texans, with a $6.77 million grant from the Texas Health and Human Services Commission, to expand access to pediatric primary and specialty care for Medicaid enrolled children in rural and underserved communities in West Texas.

In August, the Stratford Family Medical Clinic became Project CHART’s first telemedicine site. The clinic is in a small, rural community about an hour’s drive north of Amarillo.

Project CHART also will provide an outstanding platform to conduct population-based research activities that further enhance quality of life in the region, said Billy Philips, Ph.D., vice president and director of the F. Marie Hall Institute for Rural and Community Health.

Bringing learning to life

The F. Marie Hall SimLife Center will bring current and future physicians, nurses, pharmacists, and biomedical scientists together to train with mannequins that respond like real patients.

This state-of-the-art learning center provides a risk-free environment where students and practitioners can gain proficiency and enhance their performance in the competencies that vastly improve the quality of safe, patient care.

Construction is scheduled to begin on the SimLife Center in January, following demolition of the current space. The 24,415 square-foot dedicated training space will open in September 2010.

For more information, to take a virtual tour, or for giving opportunities please visit: www.ttuhsc.edu/simlife

Read more about simulated education in the Winter 2008 issue of PULSE.

www.ttuhsc.edu/communications/pulse
Thank you

Your generous gifts are essential in fulfilling the mission of Texas Tech University Health Sciences Center. Gifts reported were given between May 2009 and November 2009.

COVENANT HEALTH SYSTEM ENDOWED CHAIR IN CEREBROVASCULAR DISEASE
Covenant Health System, in partnership with TTUHSC School of Medicine, established the endowed chair to support a center for stroke care. Jongyeol Kim, M.D., associate professor in the Department of Neurology, has been selected as the Covenant Health System Endowed Chair in Cerebrovascular Disease. The chair position is a partnership between TTUHSC and Covenant.

THE JAMES A. “BUDDY” DAVIDSON CHARITABLE FOUNDATION STROKE RECOVERY FAMILY SERVICES ENDOWMENT
The James A. “Buddy” Davidson Charitable Foundation gift supports the Stroke Recovery/Aphasia Therapy program in the School of Allied Health Sciences Speech, Language & Hearing Clinic.

THE JAMES A. “BUDDY” DAVIDSON CHARITABLE AUTISM FAMILY SERVICES ENDOWMENT
The James A. “Buddy” Davidson Charitable Foundation has established an endowment to support the families who have children with autism through the School of Allied Health Sciences.

HELENE FULD HEALTH TRUST SCHOLARSHIP ENDOWMENT FOR BACCALAUREATE NURSING STUDENTS
The Helene Fuld Health Trust has given the Anita Thigpen Perry School of Nursing funding for scholarships that will benefit students in the traditional Bachelor of Nursing program.

KENNETH TERRY SCOTT ENDOWMENT FOR CANCER RESEARCH
Kenneth Terry Scott has established an endowment to benefit cancer research at TTUHSC.

DON-KAY-CLAY CASH FOUNDATION ENDOWED SCHOLARSHIP
The Don-Kay-Clay Cash Foundation has established an endowed student scholarship fund in the School of Allied Health Sciences.

LITTLETON-ANGLIN FAMILIES ENDOWMENT FUND FOR PARKINSON’S DISEASE RESEARCH
Gayle Anglin Littleton and her daughters, Becky Upchurch and Jan Allison, have established an endowed fund in the Department of Neurology in memory of their mother and grandmother, Zada Anglin. The Littleton and Anglin families are from Earth, Texas, and have strong ties to TTU as alumni. The gift also honors other family members LZ Anglin, James A. Littleton Jr. and J.A. and Rene Littleton, all deceased.

Oommen Named to Epilepsy Chair
K.J. Oommen, M.D., professor in the Department of Neurology, was named to the Crofoot Chair of Epilepsy. He also will serve as director of the Jay and Virginia Crofoot Epilepsy Monitoring Unit at Covenant Health System. The comprehensive epilepsy program began with a gift in 2007 from the Crofoots and their children, Terry and Kelly Crofoot. See the Summer 2007 issue of PULSE for their story.

Jongyeol Kim, M.D.
DISCOVERIES

RESEARCH & SCHOLARLY ACTIVITY

AN ANSWER TO ALZHEIMER'S 14
INVESTIGATIONS 15-16
AWARDS 15
ACCOLADES 16
RESEARCHERS COMBINE EFFORTS TO FIND BLOOD TEST TO DETECT ALZHEIMER’S

TRANSPORTATION UNDER CONTROL

Discovery of a specific protein structure could improve delivery of therapeutic drugs such as those targeting cancer and HIV-infected cells. TTUHSC scientists collaborated with Scripps Research Institute to determine the structure of P-gp, one of the main culprits causing cancer cells resistance to chemotherapy drugs. The protein is responsible for transporting harmful substances out of the cell, but it also targets chemotherapy drugs and those used to treat HIV. Understanding the structure of this protein will help scientists design chemicals that block the protein’s sensitivity to such therapeutic agents.

Researchers from the Graduate School of Biomedical Sciences Department of Cell Biology and Biochemistry at Lubbock who participated in study include: Ina Urbatsch, Ph.D., assistant professor; Rupeng Zhuo, post-doctoral research associate; and pharmacy student Yen Trinh.

ALZHEIMER’S DISEASE STUDY

WHAT: Study trying to identify genetic and blood markers associated with Alzheimer’s disease.

WHERE: Texas Tech Health Sciences Center’s F. Marie Hall Institute for Rural Health. Part of the Texas Alzheimer’s Research Consortium.

WHEN: Ongoing.

WHO: People ages 50 and older who have Alzheimer’s disease or mild cognitive impairment.

PROCEDURE: Annual consultation, thinking and memory test, and blood draw.

MORE INFO: Contact Larry Hill at 806.743.1575.
It’s hard for family doctors, let alone relatives and friends, to recognize when forgetfulness might hint of the early stages of Alzheimer’s disease.

But what if a simple blood test could catch the brain-ravaging illness when modern medicines help the most?

Sid O’Bryant, an assistant professor in neurology and director of rural health research at TTUHSC, and researchers from four Texas universities hope to find telltale signs of the illness lurking in a patient’s blood.

“If there was a blood test that accurately and reliably detected the disease in its earliest stages, this would allow more patients to receive treatment early on when our current medications are most effective,” O’Bryant said.

Alzheimer’s disease breaks down healthy brain tissue, eventually interfering with a patient’s ability to think, reason and remember. More than 340,000 Texans will suffer from Alzheimer’s disease by 2010, according to the Texas Alzheimer’s Research Consortium. Twice that many patients will face the disease over the next two decades, according to the consortium.

But the slight forgetfulness and occasional confusion that signify the early symptoms can be easy to miss. A full diagnosis requires a medical examination, tests on the brain and the nervous system and brain imaging, O’Bryant said. “It takes a clinician with expertise in dementia syndromes to recognize the early signs (of Alzheimer’s disease),” he said.

O’Bryant and his colleagues at TCUHSC think an Alzheimer’s test would help doctors diagnose the disease and researchers design new therapies and identify variations of the disease that might respond better to different treatments.

By joining a consortium of four other Texas institutions — Baylor College of Medicine, UT Southwestern Medical Center, the University of North Texas Health Sciences Center and the University of Texas Health Science Center at San Antonio — the Lubbock researchers recently secured part of a $6.85 million grant to find Alzheimer’s disease “markers” in the blood and genes, and use them to improve diagnosis and treatment.

The 35-year-old researcher, who graduated from University of Albany, State University of New York, hunts for blood proteins that point to early signs of the disease.

The 500 patients already in the ongoing study have helped him find some proteins related to Alzheimer’s and a new way to measure how the disease progresses, he said.

His work on Alzheimer’s disease, as well as a broader study on the health of people in two rural West Texas counties, earned O’Bryant a 2009 Early Career Award from the National Academy of Neuropsychology. The award recognizes research excellence achieved within 10 years of completing formal training, according to the organization’s website. O’Bryant has conducted work in rural health through TCUHSC’s F. Marie Hall Institute for Rural and Community Health and with Project FRONTIER.

“The finalists this year were all well qualified,” said Chris Higginson, chair of the awards committee. “But Dr. O’Bryant’s credentials were particularly impressive. The (consortium) is fortunate to have him as a member of their clinical team.”

Jim Hinds, project coordinator of the consortium, called O’Bryant’s work a “ground breaking” effort toward identifying early-stage Alzheimer’s disease.

“He is a gifted researcher,” Hinds said. O’Bryant said while his work focused on basic biology, he hopes a better understanding of the disease will improve treatment options.

“Our currently available medications for Alzheimer’s disease slow progression, which is very important in prolonging life quality (but) they do not halt or reverse the disease process,” he said. “We are hoping that a better understanding of the biological pathways associated with the disease will lead to novel treatments that halt progression.”

Richard Leff, Pharm.D., is regional dean at the School of Pharmacy at Dallas.
TTUHSC has joined forces with AT&T, 24eight of New York and Texas Instruments Inc., of Dallas to test technology that would allow doctors to check on patients at home. Andrew Dentino, M.D., works with patients at the Mildred and Shirley L. Garrison Education and Care Center. His research group is developing a means to test insoles designed by 24eight that have high-pressure sensors and accelerometers in them. These sensors monitor how walkers distribute weight and differentiate between good balance and deteriorating balance that puts a person at risk for a fall.

Such technology could allow physicians to restrict elderly patients to wheelchairs before their balance deteriorates to the point where they could hurt themselves.

Andrew Dentino, M.D., holds the Bernhard T. Mittemeyer Endowed Chair in Geriatric Medicine and is professor of family and community medicine and psychiatry in the School of Medicine at Lubbock. He also is chief of the Division of Geriatric and Palliative Medicine; and director of clinical geriatrics for the Garrison Institute on Aging.

**EMERGENCY RX**

A study recently published in the *Annals of Emergency Medicine* debunks the myth that the uninsured and poor are the primary reason emergency rooms are overcrowded. In reality, there has been an increase of emergency visits by the elderly and those who consider themselves in fair to poor health.

Between 1996 and 2005, the number of non-institutionalized people who visited the emergency room increased 16 percent, from 34.2 million to 40.8 million. Additionally, those who used emergency services three or more times a year increased 28 percent between 1999 and 2002.

K. Tom Xu, Ph.D., lead author of the study, says because emergency rooms play a vital role in health care delivery, it is important to understand the patient loads in order to improve the system. Steven Berk, M.D., and Brian K. Nelson, M.D., were contributing authors.

K. Tom Xu, Ph.D., is associate professor in the Department of Family and Community Medicine, School of Medicine at Lubbock. Steven Berk, M.D. is dean of the School of Medicine, and Brian K. Nelson, M.D., is department chair of Emergency Medicine at the Paul L. Foster School of Medicine at El Paso.
A NEW SCHOOL,
THE FIRST ON THE U.S.-MEXICO BORDER.
A PLACE WHERE THE POVERTY LEVEL
IS TWICE THAT OF THE NATIONAL AVERAGE.
FORTY STRANGERS DRAWN TO THIS COMMUNITY
WITH A COMMON GOAL: TO BECOME DOCTORS.
THEY CAME FROM ACROSS TOWN AND ACROSS
THE STATE. THEY WERE RAISED IN BORDER
COMMUNITIES AND ATTENDED IVY LEAGUE SCHOOLS.
THEY EMBRACE THE UNCONVENTIONAL EDUCATION.
THEY ARE THE INAUGURAL CLASS OF THE
PAUL L. FOSTER SCHOOL OF MEDICINE.
On the border

About 25 percent of the first class grew up on the border and see the Paul L. Foster School of Medicine as a leader in border health. Many of these students plan careers in a border community.

Cynthia Garza

Hometown, Birthplace: Harlingen, Texas

Education: undergraduate degree in business and Doctor of Jurisprudence, St. Mary University in San Antonio

Background: first generation American; worked as public defender in San Antonio; decided to pursue a career in medicine after working as a medical assistant, office manager and billing clerk in her husband’s cardiology clinic in Del Rio.

Cynthia Garza walks down the street in El Paso easily conversing with the shoppers on this sweltering August afternoon. They smile and nod at her, “… el doctor” recognizing the white coat. And that’s why she’s here.

Until she moved to El Paso in June to begin medical school, Garza lived further down the Texas border in Del Rio, where she worked alongside her husband, Frank Meissner, M.D. At the clinic, her responsibilities ran the gamut -- from receptionist to medical assistant -- depending on the need of the day. The hours were much longer than she put in as a public defender, sometimes up to 100 hours a week. In return, she says, they might be paid with a dozen tamales or some other baked goods. Yet, she describes the work as her life’s mission.

Garza, the oldest of five, overcame adversity herself to get here – working minimum wage jobs through high school and then through college and law school. It was while working on a case involving Munchausen by proxy syndrome that she says she felt ‘called’ to the medical profession. “My job as a lawyer was that. A job… Medicine is a calling.”
Nelly Estrada explains the importance of not only knowing your next move in chess, but also how that impacts your opponent’s turn. Shrewd decisions at the table led the El Paso native to five national chess championships in Mexico; and one in the United States. But deciding to return home for medical school, she says, was one of the best moves she has made. “Here is where I feel at home. I know there is a great need for physicians, and in becoming a doctor is something I can do for my community.”

Estrada’s father taught her to play chess when she was 10; she enjoyed the game, but admits a bit of covetousness when her father gave her brother a chess set. So she joined her elementary school’s chess club and played her way to the top in Mexico. Chess, she says, has taught her to organize her thoughts, a skill very beneficial as she’s learning clinical cases. “I know there is a great need and I look forward to what I can do for my community.”

**NELLY ESTRADA**

**HOMETOWN:** Juarez, Mexico, born in El Paso

**EDUCATION:** initially attended Universidad Autonoma de Cuidada Juarez to study mechanical engineering, transferred to the University of Texas Brownsville on chess scholarship, graduated with degree in biology.

**BACKGROUND:** National chess champion in Mexico; first female awarded chess scholarship to the University of Texas at Brownsville; international chess champion.

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**HOMETOWN HEROES**

Many of these El Paso natives have earned undergraduate degrees elsewhere. They have come home to earn their medical degrees and plan to stay and practice.
THE PIONEERS
These students, who came from throughout the state and country, wanted to be at a new medical school for opportunities to forge new ground.

LISA FISHER
HOMETOWN: Hermiston, Ore.; born in Nampa, Idaho
EDUCATION: undergraduate degree in biology from UT San Antonio
BACKGROUND: initially went to college to become a teacher; earned LVN/LPN certification during military service; served in Germany and then deployed to the ICU of the 67th Combat Support Hospital in Iraq.

Lisa Fisher was pursuing a degree in elementary education, working nights as a certified nurse aid to support herself. The middle child of 10, and a twin, Fisher was the first in her immediate family to attend college.

When her college coursework became a chore and her job as a certified nurse aide a welcome reprieve, Fisher says she realized that she was pursuing the wrong career. She enlisted in the U.S. Army to become a licensed practical nurse and served in Germany and Iraq.

“It was hard for me to watch my fellow soldiers dying. I did all I could for them as a nurse, but I wished that I had more knowledge to be able to help them more.”

After a medical discharge, Fisher set out for medical school. She completed her undergraduate degree at the University of Texas at San Antonio, and then chose to attend the Paul L. Foster School of Medicine because of its innovative approach to education. (see story on page 17) Fisher says the curriculum’s focus on global and border health, the integration of the medical school into the community, and the high-tech medical skills lab as well as the faculty sold her on the school.

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HANI ATALLAH

**HOMETOWN:** Garden Grove, Calif.; born in Beirut, Lebanon

**EDUCATION:** Undergraduate degree in ecology and evolutionary biology from the University of California Irvine

**BACKGROUND:** Lived in Lebanon until he was 15; exposure to dad’s work in construction led to engineering college major and then a volunteer opportunity changed his plans.

**PHYSICIAN-SCIENTISTS**

These students want to experience life on a border and be immersed in the Hispanic culture. Some come with Ivy League backgrounds, others a strong background in research.

Hani Atallah admits he had initial concerns about being in the first class of a new medical school. But he also liked the fact that the school was in an underserved community. The strong Hispanic influence in El Paso was reminiscent of what he experienced as a volunteer with Share Our Selves of Orange County, a nonprofit that provides medical services and basic living essentials.

Until his second year in college, Atallah was an engineering major at UC Irvine, something that greatly pleased his father, who owned a construction company in Lebanon before coming to the states to work as a construction superintendent. But medical trips into neighboring Tecate, Mexico, and Santa Ana, Calif., changed his career path.

“There is something beautiful about how the school (Paul L. Foster School of Medicine) is immersed in the community,” he said. Once a month, he shadows Arturo Hernandez, M.D., a pediatrician at Horizon City, located in the rural outskirts of southeast of El Paso.

With his first semester almost history, Atallah says he is at peace with his decision to attend the Paul L. Foster School of Medicine. “This is the best place I could be. The faculty is constant and their experience and expertise erase any doubts. They are responsive to our opinions about the exams and the way the information is taught.

“I’m very much at peace with the move I made.”
As inaugural first-year medical students at the Paul L. Foster School of Medicine complete their first semester, one thing’s for sure: They’re a class of pioneers.

In fact, the new four-year medical school is regarded by many as being at the forefront of medical education. While most medical students learn one subject at a time for their first two years, the Foster School of Medicine supports a curriculum that includes not only the necessary classroom courses, but also immerses students in clinical presentations right from the start.

And, before classes formally began this summer, all 40 first-year students began the process of learning Spanish to help them understand the culture in which they’ll be working … again, right from the start.

“Pure and simple, knowledge is acquired in the format in which it will be used,” said Brian Tobin, Ph.D., associate dean, associate vice president and chairman of the school’s Department of Medical Education.

A basic scientist by training, Tobin said he had a great interest in finding a way to pull an interdisciplinary curriculum together that included not only the basic sciences, but also a patient-centered format beginning in the first year of medical school.

“We aren’t teaching the disciplines in a typical classroom format here,” Tobin explained. “Instead of basic anatomy and biochemistry, we’re also talking about patients themselves … ‘Why did this patient come to see the doctor in the first place?’”

The patient-centered format includes standardized patients, or patient actors, as well as case studies of patients. Additionally, students are being matched with families in the community to learn about their health needs; and they’ll follow these families throughout medical school.

“While our students aren’t (initially) seeing patients in the hospital, they are getting a very highly integrated, clinical decision-making learning experience,” explained David Steele, Ph.D., senior associate dean for medical education and director, Office of Curriculum, Evaluation and Accreditation. “This is all integrated with the basic sciences courses.”

Along with studying the scientific principles of medicine, Steele added, students also will explore about 120 different clinical presentations in which they will be able to learn the basics and move on to actually breaking down real cases into diagnoses.

“Bottom line is that people retain information much better if they have the opportunity to learn that information the context of its application,” Steele said. “Our curriculum offers that opportunity from day one.”

It is in fact one of the reasons Lisa Fisher applied. She says the school’s innovative curriculum along with its focus on global and border health and the integration of the medical school into the community made the Foster School of Medicine stand out from the others that had offered her a slot.

In a city where the doctor-to-patient ratio is nearly half that of other cities nationwide, both Tobin and Steele have high hopes that these medical students will graduate and stay put in El Paso.

“Border health is a big ‘buzz word’ right now,” Steele said. “Although we are preparing students to practice medicine in any area of the United States, we do hope that many of our students will be...
captivated by the unique opportunities and challenges of border health and the practice of medicine on the border.”

Tobin agrees.

“There’s no doubt we hope to train and ultimately build our physician base in El Paso,” he said. “This is so important for our community.”

It’s the multidisciplinary approach that sets El Paso’s curriculum apart from many other medical schools, and the immersion of students into the community right from the start that makes it unique, Tobin added. And, it’s also the basic principle for them to take away from the school and go forth into the community.

“We have physicians and basic scientists coming together in a format to provide a curriculum that couldn’t be as great without each other,” he said. “Our goal is to define the practice of medicine – right from the start – as the community in which we live. To help our students learn … to understand and to teach the neighborhoods in which we live to be healthy – in our own backyards, our schools, our churches, our synagogues; and the list goes on.

“I believe we’re on the border – headed to the future.”

Recall your first day at school? First-year medical student Aparna Atluru gives her perspective of what it’s like to start a new chapter in life at the Paul L. Foster School of Medicine.

Read her story at www.ttuhsc.edu/communications/pulse
Women’s health researcher Chandice Covington is dedicated to preventing HIV transmission from mothers to infants in Africa. But what she is learning just might have as great an impact on women in America.
Handice Covington, R.N., Ph.D., P.N.P (BC), is no stranger to research. Her most recent focus – how to prevent mother-to-child transmission of HIV via breast milk – has taken her to Kenya, Africa, and back, and has opened a whole new world of possibilities for women worldwide.

“For years, we’ve told women that breast-feeding is good for their infants,” Covington explained. “But we have not really explained how much the mother’s health is improved by breast-feeding.”

Women who breast-feed not only deliver important nutrients to their infants, but also gain valuable nutrients for themselves – including vitamins A and E – that are important to women’s health.

With that knowledge in hand – and not enough American women to study because fewer are breastfeeding, Covington set out for Kenya, where virtually all women breastfeed, to study the health of the women of the area.

“We truly went there not to fix them; but for them to fix us,” she said.

It might be hard to comprehend, Covington says, but for many African children, breast-feeding may be the only source of nutrition for the first few years of life, and for some up to age 9.

“But as the saying goes, ‘Necessity is the mother of invention,’” Covington said. “And without mother’s milk, many of these children would die.”

What’s more, she discovered, many children are left to nurse maids because of the long treks many mothers have to make in order to gather water, roughage and other food.

And those nurse maids?

“Grandma,” Covington said. “That’s what amazed us most. We found that many 50, 60 and even 70-year-old women were still able to lactate and provide nutrition for their grandchildren.”

Such information, she says, has implications that could not only improve health for the women and children in Africa, but could also provide answers to improve overall breast health in all women.

As the Florence Thelma Hall Chair for Nursing Excellence in Women’s Health in the Laura W. Bush Institute for Women’s Health, Covington is no doubt at the pinnacle of research in women’s issues that are allowing
cultural differences to ultimately solve problems.

“We have so much we can we learn from Africa – where breast cancer is at an all-time low,” Covington explained. “And we believe it is because the women there lactate for so long into their lives.”

She has brought lessons from African women back to the United States and is studying the possibility of how lactation longevity might ultimately lower breast cancer rates in American women.

Covington will return to Kenya later this fall, to test a copper shield she has developed for women with HIV who are breast-feeding. Already, research has proven that copper will deactivate the HIV virus in contaminated blood. Covington hopes it also will work in breast milk to prevent the spread of HIV from mother to infant. (see related article below)

If it does as she hopes, a whole new world may be open to the people of Africa.

“Women ‘get it’ in Africa,” Covington said. “I hear them say, ‘I know I’m killing my baby, yet I know I’m saving my baby.’ They know their babies will either die of starvation or of HIV and ultimately AIDS. It’s a Catch 22.”

Either way, it’s a long road ahead for Covington; but it’s a path she loves -- and one that not only might shed light on the women of Kenya, but also on women worldwide.

“This is about breast health for all women,” she said. “And we’re all learning from each other.”

A research project using a breast shield proposed by Chandice Covington, R.N., Ph.D., P.N.P. (BC), F.A.A.N., has received a $100,000 Grand Challenges Exploration grant from the Bill & Melinda Gates Foundation prevent HIV transmission through breast milk. Covington is working with scientists at Cupron Inc. of Israel on “The Cupron Breast Milk Shield to Prevent HIV Transmission.”

The breast shield, proposed to Cupron by Covington several years ago, combines the company’s multipatented technology and Covington’s past research in Kenya on prevention of mother-to-child transmission of HIV. The project will include lab and field tests in the company’s Israel lab and in Kenya for Phase 1. The concept under investigation suggests that the breastfeeding shield would prevent the transmission of HIV by deactivating the virus while the mother breast-feeds her baby using the Cupron shield’s copper oxide filter as a broad-spectrum antiviral.

This collaboration started five years ago when Covington worked with Cupron scientists on a blood filter that deactivates HIV. Their work was published in 2008 in Antimicrobial Agents and Chemotherapy. If “proof of principle” can be established, the Gates Foundation will invite this research team to submit a larger grant next year that provides a trial of the innovation in Kenya. The concept has great public health significance in developing nations, as breastfeeding continues to be the main source of HIV infections. The virus also is a problem among pregnant women in India and Asia.

Reprinted with permission from Fall 2009 Connections, quarterly newsletter of the Laura W. Bush Institute for Women’s Health
On the diamond, gridiron, hardwood or in the ring, health care professionals provide a line of defense that keeps the pros in the game. Here are their stories.

By Doug Hensley

STEVE WILSON, M.D., (SOM ‘80)

One of the many benefits of spending a decade with the Round Rock Express is a chance to observe greatness – on the field and off.

Steve Wilson, M.D., is the team physician for the Express, a minor league baseball class Triple A affiliate of the Houston Astros, and one of the team’s owners is the original “Express,” former pitching legend Nolan Ryan.

“I’m really lucky to work with a good team,” said Wilson, an orthopaedic surgeon. “The owners here do a really good job of running the team. It’s a quality operation from top to bottom. Everyone is really nice, and it’s a lot of fun to work with those guys.”

Typically, Wilson attends most of the team’s home games. After checking with team trainers regarding player injuries, he then spends time with the athletes.

“We had three players hurt this past season, and I went with them to the emergency room to have them checked out,” he said. “Most of what I deal with is orthopaedics. We also have an internal medicine doctor, but if he’s not there, I handle those needs. And we also have cases where players’ kids, wives or family members have a medical problem that I am asked about.”

Wilson said he works as a liaison between players and management, remaining neutral because athlete health is his top priority.

“I try not to be really close with management or with the players,” he said. “I get to know the players because I work with them, but I do my best to be neutral between the
two parties to just try and help facilitate taking care of players.”

Having been in practice for a number of years before the Express pulled into town, so to speak, Wilson said becoming the team’s physician was a matter of good timing.

“I just happened to be in the right place at the right time,” he said. “I got involved, and it worked out well for both of us, I think, and I continued to work with them.”

The arrangement also allows Wilson to enjoy another hobby – photography.

“I’m also kind of the unofficial photographer for the Round Rock Express, and they’ve used my photos in their promotions and on their Web site,” he said. “I do their team photos as well as individual photos. They also issue player cards each year, and the photos on those for the past three years have been my photos.

“So to be the team doctor and have a chance to take pictures of them, that’s been fun.”

Especially when some of those photographs turn out to be of players bound for the major leagues. Familiar names that have made a stop in Round Rock before packing for “the show” include Astros pitcher Roy Oswalt, outfielder Hunter Pence and catcher Humberto Quintero.

“It’s kind of fun to watch a major league game and see someone who I took care of here in Round Rock,” Wilson said.

He’s also had the chance to meet former Texas All-America pitcher Burt Hooton, who serves as the Express pitching coach, and Jackie Moore, now an assistant coach for the Texas Rangers.

Wilson was quick to credit TTUHSC in general and Emmet Shannon, M.D., in particular for helping place him on an enjoyable and rewarding career path.

“When I was a medical student, I did a rotation with Dr. Shannon,” he said. “He was an orthopaedic surgeon for many years, and he was a team physician for the Tech football team. I got to spend a couple of months working with him and the football team. That had a lot to do with what I am doing right now.”

Scott Smith, M.D., (SOM ’91)
As the team physician for the Austin Toros, Scott Smith, M.D., really looks up to the athletes he watches over.

“It’s really amazing,” he said. “One of the hardest things for me to do is when a guy gets poked in the eye. He’s so tall, and I can’t look in his eyes and I’m 6-foot-3.”

Smith is entering his fifth season as team physician for the Toros, an NBA developmental team affiliated with the San Antonio Spurs. In that time he’s seen a little bit of everything while getting the opportunity to work with high-quality athletes in a top-notch organization.

“This is a farm team in a sense,” he said. “The developmental league is kind of an evolving concept where they’ve added a number of teams recently. It’s fast becoming a training ground for players, coaches and officials.”

An avid sports fan, Smith said serving as team physician keeps him close to a game he enjoys and lets him use his skills as a trained physician.

“I’ve seen every one of their games in Austin,” he said, “and this is a chance to see the stars of tomorrow. Every one of the players was an all-American in college. They are unbelievably talented, and four or five of the players are going to move into the NBA at some point of the season.

“Plus, the chance to be associated with the Spurs is great. They run a first-class organization, and the bar is very high when it comes to expectations. That’s the fun part. It’s a high level of basketball, and being on the inside is a chance to see how a first-class organization is run.”

Smith said he covers roughly 30 home games a year for the Toros, and the physician for the home team covers all medical needs for both teams during games. “I’ve seen eye injuries, back injuries, a little bit of everything,” he said. “I haven’t had anything serious enough to be career-ending, but I have seen just about everything.”

Former Missouri coach Quin Snyder is the team’s coach, and familiar names that have been part of the Toros’ roster include former Iowa State star Marcus Fizer, former Cincinnati star DerMarr Johnson and former Arizona standout Marcus Williams.

“I’VE SEEN EYE INJURIES, BACK INJURIES, A LITTLE BIT OF EVERYTHING, I HAVEN’T HAD ANYTHING SERIOUS ENOUGH TO BE CAREER-ENDING, BUT I HAVE SEEN JUST ABOUT EVERYTHING.”

—Scott Smith, M.D.
TEAM PHYSICIAN, AUSTIN TOROS
“It’s fantastic to have courtside seats for 30 games every year,”
Smith said. “I coach a lot of sports, including basketball with my kids.
Having the chance to be exposed to a Quin Snyder and guys like that
from the Spurs organization is very nice.”

Smith said the training he received in orthopaedics at the School of
Medicine helped prepare him.

“My M.D. degree was fantastic because the orthopaedic department
at Tech was unbelievable,” he said. “The faculty included three past
presidents of the American Academy of Orthopaedic Surgeons who
helped me get into residency. I received unbelievable exposure in
medical school that prepared me for my residency at Michigan State.”

Now, Smith balances the demands of his practice and serving as a
team physician with the joys of being a parent.

“It’s a big commitment during the season because of multiple hours
outside the regular practice routine,” he said. “I’m busy in sports
medicine, and I help cover high school teams. I also have four kids
who are all athletes, and I’m coaching my 24th season. I’m a Scout
master, and that takes time, too. But it all fits in with my practice, and
it gives me a great opportunity to work with these great athletes.”

Surely, there’s not much difference between those two stops.
“Actually, there’s a big difference,” he countered. “The main
one is the number of players on the roster. At the rookie level,
it’s pretty much unlimited, and you can have between 35 and
40 players, which is a huge load for me as one person. Injury-
wise, we could have as many as 12 guys rehabbing with
four or five of them on a throwing program. I’m the guy who
throws with them every day, so it can be a lot of work.”

Meanwhile, at Asheville, the roster is capped at
25 players, cutting down the demands, but not the
expectations, for a trainer.

“A trainer better be in pretty good shape, especially when it
comes to throwing programs,” he said. “It depends on several
factors. If someone’s coming off surgery, they’re going to throw
every other day and it will be several weeks before they throw
every day. But if a guy is just a little banged up, a non-surgery
injury with a little time off, he’ll start throwing every day.”

Today’s trainers, Whitehead explained, must wear a number
of hats at the minor league level. They should be diplomats,
time managers, organizers and communicators, sometimes
all at the same time. For a typical evening game, Whitehead
said his workday will begin around 12:30 p.m. and continue
until about 11 p.m.

Daily game-day duties include preparing the training
area for players who are rehabbing, communicating with
managers and coaches and updating them on the injury status
of players, and touching base with the general manager about
day-to-day matters such as travel and accommodations.

“I start treatments around 2:30 p.m., and guys don’t have
to be on the field until 4 p.m., so I have about 90 minutes to
dotreatement and get guys on the field. That’s throwing
programs, running, whatever it calls for.”

Once the game starts, the pace slows somewhat, although
he occasionally helps chart where opposing batters hit the ball
each time they come to the plate to help the defense prepare
for the player’s next at-bat.

“After the game, postgame treatments are pretty short,”
he said. “If somebody is hurt during the game, I take them
immediately into the dugout, evaluate them and give them
what they need. If they need to be seen by a physician, I
arrange that. If not, I make a phone call and get them in the
next day to be seen.”

He said smoothly moving from one role to the next is a
direct result of instruction at TTUHSC.

“I came out of the Health Sciences Center with a master’s in
athletic training, and I felt extremely prepared for what I was
about to get into,” he said. “I think because of that education,
I really have good abilities to evaluate and treat guys,
especially at this level, where you are dealing with highly
paid and high-priority guys.”
James Kruk, MAT, ATC, CSCS (SOAHS ’08, Master of Science in Athletic Training)

After the rigors of spring training and the drain of a regular season, James Kruk got just what he wanted: a little more baseball.

Since graduating from TTUHSC just more than a year ago, Kruk, MAT, ATC, CSCS, became an athletic trainer for the Great Falls (Mont.) Voyagers, a Chicago White Sox rookie team. Once the minor league season ended, he went to Glendale, Ariz., where he is working with top prospects at the club’s instructional league.

“The biggest thing athletic training-wise, at least what worked for me because I kind of took a different path, is you need to be a hard worker and put yourself out there,” he said. “I didn’t work clinics, high school or college, but what got me this job was I did internship after internship.

The Great Falls team was an advanced rookie short-season team. As one of the trainers in the White Sox system, Kruk was assigned to a minor league squad.

Kruk said he was unsure if trainers really ever had typical days, but if the team had a night game, he would arrive at least five hours ahead of the first pitch.

“I like to come in first thing, set up and get my paperwork done,” he said. “That helps me get ready for the day. By 2 p.m., players are coming in, doing their exercises and whatnot that they need to do for me before getting outside and stretching and throwing.

“I do that with them, and if I’m not doing it with them, I make sure I’m out there observing and making sure all goes smoothly. After the game, I check to see if anyone is injured, take care of them, file reports and start getting ready for the next game. Some days are longer than others.”

Kruk said trainers need good people skills in addition to their core medical competencies.

“There are so many things, from general to specific,” he said. “You have to have general people skills because you’re dealing with a lot of people, from professional athletes to the coaching staff to the front office.”

Kruk also said he even occasionally deals with an inquisitive parent.

“Sometimes parents want to talk to me,” he said. “You have to realize some of these athletes are out of high school and relatively young. Even when they’re out of college, they still occasionally have parents who want to talk.”

The job of the trainer has evolved significantly from the days of handing out ice packs and taping ankles.

“Sure, you still treat traditional injuries like ankle sprains and stuff like that, so anatomy is probably the most important thing from an educational point of view,” he said. “But I always come back to hard work. I got to work with the Texas Tech baseball team for a full year, fall and spring, and working with the athletic trainers there was a huge help. Without doing the internships I did, I wouldn’t have this job. There’s no way around that.”

Kruk said all of his experiences in the TTU System helped ready him for the future.

“What I learned at TTUHSC and in my internships was invaluable to me,” he said. “Those are the things that got me here. The curriculum was great and having the chance to work with athletic trainers was incredible. I was lucky in a way because of the great curriculum and the internships. I really consider myself lucky.”

“Sure, you still treat traditional injuries like ankle sprains and stuff like that, so anatomy is probably the most important thing from an educational point of view. But I always come back to hard work.”

—James Kruk, Mat, ATC, CSCS trainer, Great Falls Voyagers
Michael Dixon, M.D. (SOM ’98)

In the world of mixed martial arts, the margin for error is thin for competitors and on-site physicians alike.

“These guys realize the importance of having a plastic surgeon on board,” said Michael Dixon, M.D. “They make their living competing. If one of them has a laceration that is poorly repaired, it’s likely to become an issue in their next fight and possibly cause them to have decreased earning capacity.”

Dixon’s practice is High Plains Plastic and Reconstructive Surgery PA in Amarillo, and he also has served as an on-site physician for Shark Fight Mixed Martial Arts.

A typical night’s work for Dixon in his on-site capacity might include repairing lacerations, providing initial management of concussions, monitoring stressed joints and referring athletes for further evaluation. Generally, he handles one fight card about every four to six weeks.

While those injuries are all serious, that’s not to say the world of mixed martial arts is some unregulated brand of street fighting.

“This history of the sport of mixed martial arts was no holds barred,” he said. “There were several injuries, none life-threatening, but the state now sanctions these fights. They have to be done according to state law and state regulation. State officials are at every one of these fights. They are not back-alley brawls like they used to be.”

The regulations cover on-site physicians, who are required to have a Texas state combat sport license. “You have to be approved by the state and have that state license to be able to serve in that capacity, so the state can sanction the bout,” he said.

Dixon said he obtained the license because of his background as a doctor in good standing in the state, his background and his specialty.

“I have training in an area that would be beneficial to that environment,” he said. “Orthopaedic surgery, neurology, family medicine and internal medicine would be beneficial to it. Training to deal with head trauma, extremity trauma and soft tissue trauma. No one gets sick. They go in there and receive trauma, and people with training toward trauma are desired by the state to be in those positions.”

Dixon said he also is a fan of the sport. He and his son are studying Brazilian jiu-jitsu together, and numerous aspects of mixed martial arts appeal to him.

“These are professional, well-trained athletes competing just like a boxer or like a football player,” he said. “They are practicing mixed martial arts as their sport, and mixed martial arts is a mixture of wrestling, grappling, punching and kicking. It’s a very diverse sport, probably the fastest growing sports in the United States right now.”

Dixon, a native of Spearman, Texas, said he is proud of his degree from Texas Tech and of the chance to give back to a part of the country that’s been good to him.

“I wanted to stay close to my family, and that’s why I chose Texas Tech over other places where I was accepted,” he said. “I wanted to stay close to the Panhandle, which is why I went to TTUHSC, and the closest place to Amarillo to do my plastic surgery residency was Oklahoma City.”

“I love the fact that Tech is in this area to train people to stay in this area, and that’s what I did. From the day I enrolled and wanted to be a doctor, I wanted to stay in this area and take care of the folks and do it very well.”

Also on the roster:
Visit PULSE online to see the roster of other faculty, students and alumni who have provided care for those in the big leagues.
As the health care landscape becomes increasingly specialized, effective communication between medical professionals is paramount to providing patients with the best possible treatment options. It is a reality that Carol Fox, Pharm.D., OTR, certainly understands.

After working 10 years in geriatrics as a registered occupational therapist, Fox returned to school and earned her pharmacy degree. The decision, she says, has helped her become a better caregiver to her patients. “As an OT, I worked very closely with nursing staff and established good working relationships with them,” Fox explains. “My experience as an OT also helped me be a better caregiver as a pharmacist. I can empathize with my patients because I have seen many in their condition.”

Fox says several factors led to the career change. Improving her ability to discuss medications with her patients was at the top.

“Geriatric patients, although wise in years, often have a limited knowledge of the medications they are taking. They truly appreciate someone taking the time to sit down with them and discuss their medications, including possible side effects, interactions and medication adherence techniques. I decided that pharmacy would be a good fit for me based on these types of dilemmas.”

The career change also has given her insight into the importance of interdisciplinary education.

“With my background in two health professions and involvement with many others, I feel that students in different health professions have so much to learn and gain from each other. I hope it will bring interdisciplinary care to a whole new level.”

“With my background in two health professions and involvement with many others, I feel that students in different health professions have so much to learn and gain from each other. I hope it will bring interdisciplinary care to a whole new level.”
In its 40-year history, the School of Medicine has graduated more than 3,000 physicians and, most recently, celebrated the opening of its sister school, the Paul L. Foster School of Medicine. These accomplishments and the recognition of many who play a key role in its success, were the highlights at the school’s anniversary celebration in September.

School of Medicine Dean Steven Berk, M.D., said Gov. Preston Smith’s original vision for establishing the medical school has grown beyond expectations. In addition to meeting the need for more physicians, the School of Medicine also serves a population of 2.5 million people who live throughout a vast 108 county area. TTUHSC health care providers see about 200,000 patients each year.

Additionally, Berk says, the School of Medicine has almost doubled National Institutes of Health funding and research expenditures.

“It is to the founding fathers credit that we have achieved much and served many during the past 40 years,” Berk said. “Without their vision and tenacity, as well as the support of the state legislature and our community, this School of Medicine and now Texas Tech University Health Sciences Center would not exist.”

The School of Medicine honored community medical educators and distinguished alumni at its 40th Anniversary celebration dinner. (see page 34 for the Distinguished Alumni honorees)

Those honored as outstanding community medical educators:

Mark McClanahan, M.D., (’01) clinical assistant professor, Department of Family and Community Medicine; private practice in Plainview.

John Cobb, M.D., (’01) clinical assistant professor, Department of Psychiatry; private practice in Lubbock.

Mark Gallardo, M.D., (’01) clinical assistant professor, Department of Ophthalmology; patient practice at El Paso Eye Surgeons in El Paso.

Doug Klepper, M.D., (’89) clinical associate professor, Department of Pediatrics; patient practice at Pediatric Associates of Lubbock.

Bryan Smitherman, M.D., (’97) clinical assistant professor, Department of Orthopaedic Surgery; patient practice at Texas Tech Physicians Lubbock, Center for Orthopaedic Surgery.
friends we’ll miss

State Sen. Teel Bivins died Oct. 26, 2009, in Amarillo. He served five terms in the Texas legislature and was a champion of higher education.

Laura Ann Crittenden died June 1, 2009, in Garland. She served as the research project administrator at TTUHSC at Lubbock from 1991 to 1997.

Z.W. Hutcheson Jr., M.D., died Aug. 8, 2009, in Amarillo. He was an associate clinical professor in the Department of Family Practice at the School of Medicine until 1988. His black medical bag is a part of the Southwest Collection at TTU.


Josephine “Jody” Marie Meador, M.D., (SOM ’82) died June 2, 2009, in Brunswick, Maine.

Orene Whitcomb Peddicord, M.D., died June 13, 2009, in Lubbock. Dr. Peddicord was a charter member of the School of Medicine faculty, serving as an associate professor at the School of Medicine from 1971 to 1989.

Bryan Peeler, M.D., (SOM ’89) died Aug. 30, 2009, in Paducah. He had a private practice in Plainview.

Walter S. Piskun, M.D., (SOM ’74) died Aug. 4, 2009, in Amarillo. Dr. Piskun was president of the first class to graduate from the School of Medicine. His wife, Mary Ann Piskun (SOM ’74), also was a member of that class. Dr. Piskun was a clinical assistant professor in the Department of Surgery, Neurosurgery, at the School of Medicine at Amarillo from 1988 to 1997 and clinical associate professor from 1998 to 2009. He also participated in the department’s undergraduate medical education programs.

Susan E. Pollock-Brewster, R.N., Ph.D., F.A.A.N., died Aug. 23, 2009, in Port Saint Lucie West. She was an associate dean for research and professor at the School of Nursing from 1994 to 2000. Dr. Pollock-Brewster also served on the TTU System Chancellor’s Council.

John H. “Jack” Selby, M.D., died Sept. 9, 2009, in Lubbock. He was a clinical professor of surgery in the School of Medicine from 1973 to 2003.

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.

TTUHSC welcomes Nathan Rice as director of Alumni Relations. He joined the university Sept. 1, coming from Champaign, Ill., where he served as director of sales for the Champaign County Convention and Visitors Bureau. Rice was born in Lubbock and raised in the Dallas-Fort Worth area. He is a 2003 graduate of Texas Tech University, earning his Bachelor of Arts in Public Relations, with a minor in Spanish. Rice is married to Jennifer Rice, Ph.D., who is an assistant professor in the TTU Edward E. Whitacre Jr. College of Engineering. Nathan can be reached at nathan.rice@ttuhsc.edu or 806.743.3238.

Distinguished Alumni 2009

School of Medicine
Research Award: Gail Demmler-Harrison, M.D., (’77) professor, pediatrics and pathology, Baylor College of Medicine
Alumni Award: Lorenz O. Lutherer, Ph.D., (’77) professor, TTUHSC School of Medicine Department of Cell Physiology and Molecular Biophysics, secondary appointment in the Department of Internal Medicine
Service Award: Jeffrey W. Oliver, M.D., (’95) associate professor, TTUHSC School of Medicine Department of Pathology

School of Pharmacy
Excellence in Practice Award: Brent Fox, Pharm.D., (’00), clinical pharmacy specialist, Texas Health Harris Methodist Hospital Fort Worth
Excellence in Leadership Award: Lea Swanson-Eiland, Pharm.D., (’02), assistant clinical professor, Pharmacy Practice, Auburn University Harrison School of Pharmacy

The School of Medicine’s 40th anniversary celebration in September included a reception for students as well as dinner and a pre-game barbecue for alumni, faculty and community physicians. The school’s history was presented in a freestanding exhibit that is viewable in PULSE online.

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The research bug bit MATTHEW B. GRISHAM, Ph.D., more than 35 years ago when he was an undergraduate student at the University of South Florida. “It’s something of an inside joke among us. Research becomes your hobby and your job all in one … it’s truly a dream come true.”

Now a Boyd Professor at the Louisiana State University Health Sciences Center, Grisham’s current work focuses on trying to determine the immunological mechanisms responsible for the intestinal tissue damage observed in patients with the inflammatory bowel diseases such as ulcerative colitis and Crohn’s disease. Understanding how chronic inflammation causes tissue injury could prove beneficial not only in patients with IBDs, but also in other chronic inflammatory disorders such as rheumatoid arthritis, diabetes and multiple sclerosis.

During his career, Grisham has developed an impressive portfolio — 20 years of continuous NIH funding; 260 peer-reviewed journal articles and 80 book chapters — but he quickly defers a great deal of his success to his Ph.D. mentor Johannes Everse, Ph.D., and energetic faculty members such as Doug Stocco, Ph.D.
Doug Moore, M.H.A., MT (ASCP) ’91
Clinical Support Service Management

DOUG MOORE, M.H.A., MT (ASCP), spends much of his free time hiking and camping in the mountains with his children. But during the week, the father of two prefers the great indoors.

Moore, laboratory director at Texas Health Presbyterian Hospital in Denton, once considered turning his love of nature into a career in range and wildlife management, but discovered his personal interests differed from his professional goals.

A random mailing from TTUHSC describing the Medical Technology program, now Clinical Laboratory Science, reawakened Moore’s interest in the medical profession. He transferred from Angelo State University to TTUHSC to work toward that degree.

Moore is responsible for the day-to-day administrative and technical oversight of a clinical laboratory, which includes accreditation readiness, performance improvement and development and maintenance of procedures. He said he most enjoys collaborating with other health care providers to improve quality of life for countless individuals.

“I have had the opportunity to work with some of the most caring and compassionate individuals in my career,” Moore said. “Most will never be famous or rich, but the services they provided to those patients and families that they have cared for was done from the heart and cannot be measured monetarily.”
Sometimes memories in life are so great, people are compelled to revisit them. For MILINDA MIERS MORRIS, M.D., revisiting was not good enough; she had to return to the place she was taught and give back.

Morris was a member of the School of Medicine’s first residency class of obstetrics and gynecology at the Permian Basin. “Dr. Carol Bergquist was my mentor during my residency,” Morris said. “Back in those days, there weren’t many women in the program.”

Bergquist was one of the founding faculty members in the department, which began providing women’s health care in Odessa and at the Permian Basin in 1983.

After finishing a term in the Air Force, Morris pursued a career in private practice. At one time, she had three offices, was managing a public health clinic and still had one of her four children at home. Morris said she grew weary of the pace and made the decision to change career paths.

After 18 years and 5,000 delivered babies — two of whom were her own grandchildren, Morris returned to her roots. In September, she joined the School of Medicine at the Permian Basin as an assistant professor of obstetrics and gynecology. Morris now works alongside her mentor. “I never thought I would come back,” she said. “It feels like home … back where it all started.”
Larry Thompson, Pharm.D., has a special appreciation for the men and women who protect the country through their military service.

“My father is a Vietnam veteran, and I am extremely proud of his service,” Thompson explains.

Shortly after graduation, Thompson joined the West Texas Veterans Affairs Health Center in Big Spring, Texas, as a clinical pharmacist specialist. Four years later he is assistant chief of pharmacy and is responsible for coordinating clinical pharmacy services, which includes the hospital, ambulatory and nursing home care units. He has also led the effort to modernize the facility’s drug dispensing methods.

Thompson has helped the hospital implement a ‘cartless fill’ system whereby all drugs are obtained and delivered through an automated medication machine. He says the technology has increased accountability and improved inpatient safety because patients are individually profiled, and the risk of medication error is significantly reduced.

Thompson also served as project manager for remodeling the facility’s outpatient pharmacy. Efficiency there has significantly improved with a new layout of the outpatient area and addition of automated prescription dispensing, he says.

All of the hard work and innovation has helped Thompson fulfill his vision of better serving those who serve our country.

“Veterans are an amazing group of individuals. One would be hard pressed to find a more respectful and kind group of men and women.”
As a teenager, LAURA ATKINS, R.N., B.S.N., M.B.A., CCRN, spent weekends volunteering at St. Mary of the Plains Hospital, now Covenant Lakeside, in Lubbock, Texas. It was there she realized her passion for patient care.

But life got in the way of her path to nursing school, and Atkins, a single mother, gave up a college career and spent years in an unfulfilling job to make ends meet. When she made the decision to re-apply to Texas Tech University and move from Dallas back to Lubbock, Atkins was determined to finish her bachelor’s degree in health and sociology and make a better living for herself and her daughter.

Atkins made a second career move, and by the time she graduated from the School of Nursing had found her niche in the burn unit at University Medical Center in Lubbock. Atkins now is a charge nurse for the unit.

“It’s what I had in my mind that nursing was,” she said. “It is the one place that I can actually see that I make a difference in the outcome of someone’s hospital stay.”

Atkins also has made a difference in the lives of other nurses. For three of the last nine years, she has coached students in the Anita Thigpen Perry School of Nursing to think critically at the bedside and encouraged them to be the best they can be for their patients.

“I want to give my knowledge,” Atkins said. “Somebody shared that with me and I want to share that with someone else.”
It’s our job to make a difference

BY EDUARDO OLIVAREZ

In these troubled economic times and with talk of health care reform, students in health care may share a feeling of uncertainty as they prepare for the future because of the perplexity of changes that reform may bring to all health care professions. The front line task of caring for a patient may not change, but imminent changes to the existing system has many current and future health care workers concerned about their career choices. Heated debates that arise from the topic of reform provide a means for one to voice an opinion. These are great opportunities to let your voice be heard no matter your viewpoint or political affiliation.

All health care professions have national organizations addressing current issues and provide ways to become involved locally. You can find organizations that share some of the same concerns and viewpoints for your specific profession — the choice is yours to make, either sit back or become involved. This is an important time in the history of the United States of America, and current and future health care workers have an opportunity to participate in the process.

The massive undertaking of health care reform will have approval and opposition from within the health care field. But as a health care worker, you can make a difference in someone’s life no matter how you feel about the issue.

Eduardo Olivarez, far left, is a nursing student in the Anita Thigpen Perry School of Nursing and an officer in the Texas Nursing Student Association. He also serves as vice president of communications for the TTUHSC Student Government Association. Other members of the SGA Executive Office are, Cory Robertson, president; Melissa Schulze, vice president of operations; and Samir Shahani, vice president of finance.
There are a number of organizations or foundations that Gayle Anglin Littleton and her daughters, Becky Upchurch and Jan Allison, could have supported; but they chose to invest in TTUHSC.

Their gift has established the Littleton-Anglin Families Endowment Fund for Parkinson’s Disease Research at the School of Medicine at Lubbock. Given in memory of LZ and Zada Anglin, James A. Littleton Jr., and J.A. and Rene Littleton, this gift will support clinician salaries, specialized equipment and scholarships as well as training and other educational programs.

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