



# PULSE

WINTER 2012 | A PUBLICATION *for* ALUMNI & FRIENDS *of* TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

## Believe AND Achieve

Former NFL tight end Steven E. Brooks, M.D., (Resident '11) never had any doubt that he belonged on the team.

# PULSE



## BELIEVE & ACHIEVE

Steven E. Brooks, M.D., (Resident '11) realized his days in the NFL were over. There was no career-ending injury nor did he get too old to play the game. The time had come to trade his jersey for a set of scrubs.

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## RESEARCH ASSISTANT

Before a team of researchers from allied health sciences, medicine and engineering can move forward with their study in identifying risk factors that contribute to falls in patients with compromised balance, they need to have IRB approval. For that, the trio turned to the experts at the Clinical Research Institute.

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## THREE'S COMPANY

They each arrived at TTUHSC School of Nursing in the early '80s with their own childhood dream. After 30 years and several careers, Ann Hagstrom, M.S.N., B.S.N., (SON '86), Vicki Johnson, Ph.D., M.S.N., B.S.N., (SON '84, '90), and Capt. Jan Rose, M.S.N., B.S.N., (SON '84) are once again at their alma mater. This time, they're sharing their passion for nursing with the next generation.

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## SOCIAL NETWORKS

For years, Thomas Hale, R.Ph., Ph.D., published his findings on lactation and medication interactions in a very traditional way. His book, *Medications and Mother's Milk*, is still a best-seller, but the InfantRisk Center has made the information more easily accessible through online forums and mobile applications.

## departments

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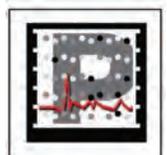
*Danielle Jones*

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## ALUMNI

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*BIOMEDICAL SCIENCES '96*  
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TTUHSC School of Pharmacy, Amarillo, Texas



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*NURSING '06*  
Clinical Nurse Consultant  
B. Braun Medical, Dallas, Texas



The caped crusaders of social behaviors that were featured in the Summer 2011 issue (pg. 16-17) have become international heroes. Marie Leiner, Ph.D., health communicator and research associate in the Center of Excellence for Neurosciences/Psychiatry at the Paul L. Foster School of Medicine, reports the training books being used in El Paso preschools have been translated in Portuguese for use in Brazil. Additionally, the Kohl's Safe Child Initiative website has received additional funding and will be introduced into El Paso elementary and middle schools as an educational tool to influence attitudes and change behaviors about health and safety issues.

You can check out Kohl's Safe Child Initiative at  
<http://bit.ly/vEEMU>



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*alumni activities*  
BETWEEN ISSUES AT



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and follow us on



(TTUHSC Alumni Association)



## COLLABORATION WITH TTU BRINGS NEW OPPORTUNITIES FOR HEALTH CAREER STUDENTS

Join me in celebrating a new collaboration! TTUHSC and TTU Honors College have constructed a program of study we are confident will give pre-professional health career students a decisive advantage in securing admission into the medical schools of their choice. With 40 percent of new undergraduates enrolling in pre-professional health career programs, those who vie for a spot in a high quality medical school find the competition daunting and the interviewers selective. Completing this new baccalaureate program will move them to the top of the list. The joint TTU-TTUHSC Honors Arts and Letters Health and Humanities track is uniquely designed to provide students a well-rounded education. In addition to the understanding they will acquire in science, as has been the traditional focus, students will garner knowledge and skills in the humanities, languages, mathematics and business.

This new educational track requires students to complete a study abroad to help them attain a global awareness as well as develop leadership skills. Students are also afforded some flexibility in that they may select five to 10 health-related courses of their own choosing. Being able to add selected courses to the program's rich core enables students to create a more personalized educational experience. These students will undoubtedly benefit a great deal from international experiences (both clinical and academic) and conducting research with distinguished faculty from both TTU and TTUHSC.

In addition, those students who qualify are able to bypass the MCAT and apply early to TTUHSC's School of Medicine. Eliminating the MCAT requirement enables students to wholeheartedly engage in the Honors College and diverse course work and experience, instead of devoting hours and hours of study focused on achieving a high score on the MCAT.

We are excited about the joint TTU-TTUHSC Honors Arts and Letters Health and Humanities track and have great expectations that it will bring scholars of excellence to TTUHSC.

Tedd L. Mitchell, M.D.  
President

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*CORRECTION: The Summer 2011 issue contained an incorrect byline. The cover story "Facing Alzheimer's" was written by Kim Davis. We apologize for the error.*

# Wood Family Foundation

## ESTABLISHES LEAD GIFT TO EQUIP NEW SIMULATION CENTER AT THE PERMIAN BASIN

Thanks to a generous gift from the Wood Family Foundation, TTUHSC students at the Permian Basin will soon have access to the latest in simulation training. Clay and Louise Wood presented TTUHSC with the lead gift in November for equipment to furnish the new clinical simulation center being constructed in Odessa's Medical Center Hospital.

The new clinical simulation center will be an interdisciplinary educational clinical laboratory that will promote safe, quality patient care through innovative simulation technologies. Within the 13,789 square foot facility, there will be realistic patient care environments such as hospital and clinical exam rooms as well as an operating suite and scrub room. Each room will be equipped with a computerized digital audio-visual system as well as high-tech training simulators, mannequins and other supplies.

TTUHSC President Tedd L. Mitchell, M.D., said the gift from the Wood family establishes an important foundation for clinical simulation and medical education at the Permian Basin.

Many of the Wood family members are TTU alumni and have been strong supporters of the Texas Tech System. Their gift, said John C. Jennings, M.D., regional School of Medicine dean, will enhance education for TTUHSC students by allowing them to prepare for the real world of health care. Ultimately, he added, it will enhance what this partnership between TTUHSC and Medical Center Health System can do to improve the quality of care for residents in the region.

The new clinical simulation center is expected to be completed in 2012.



Clay and Louise Wood



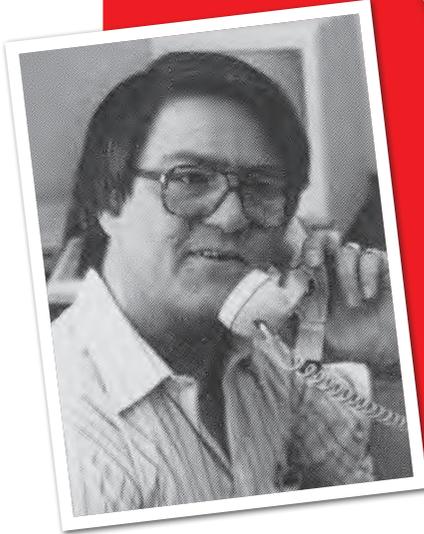
**TTUHSC FACULTY REYNOLDS, KANU RECIPIENTS OF NEW CHAIRS IN ONCOLOGY, PEDIATRICS** :: TTUHSC and Covenant Health System announced in December the establishment of two new chair positions at the TTUHSC School of Medicine.

"These endowed chairs are a testimony to the strong relationship between TTUHSC and Covenant and to the commitment of both institutions to provide optimal patient care and research," said TTUHSC Executive Vice President and Provost and School of Medicine Dean Steven L. Berk, M.D.

Patrick Reynolds, M.D., Ph.D., director of the TTUHSC School of Medicine Cancer Center and professor of cell biology and biochemistry, pediatrics and internal medicine, was named the Covenant Health System David R. Close, M.D., Endowed Chair in Oncology. Close, an oncologist with Covenant, was the first board-certified oncologist in Lubbock.

Adaobi Kanu, M.D., director of the Cystic Fibrosis Foundation at TTUHSC School of Medicine and associate professor of pediatric pulmonology, received the Covenant Health System Robert Moore, M.D., Endowed Chair in Pediatrics. The endowed chair was named in memory of Moore, who developed and chaired the first department of pediatrics at TTUHSC. He also was instrumental in opening the first neonatal nursery between Dallas and Denver.

## Guess WHO?



<<<< He no longer wears red velveteen, but his desire to help others in their giving will never go out of style. Can you guess who? **see story on page 12**



*TTUHSC President Tedd L. Mitchell, M.D., and Harrington Regional Medical Center Executive Director Michael Callahan*

### *Gift to TTUHSC Amarillo to enhance simulation learning*

TTUHSC at Amarillo will be expanding its campus in the near future thanks to a generous gift from Harrington Regional Medical Center.

In September, TTUHSC received 10.8 acres adjacent to the existing campus and will be adding new facilities, the first of which will be a state-of-the-art simulation-training center. SimCentral will provide hands-on educational opportunities for TTUHSC students as well as for those training at Amarillo College and West Texas A&M University.

As with simulation centers at TTUHSC campuses at Lubbock, El Paso and the Permian Basin, SimCentral will use hi-fidelity human patient simulators to provide multidisciplinary training opportunities to medical, nursing and allied health students as well as residents.

“This is a great example where organizations and educational institutions join together and work for the greater good of the community and the region,” said TTUHSC School of Medicine Regional Dean Richard Jordan, M.D.

## SCHOOL OF PHARMACY DEAN PLANS RETIREMENT THIS SUMMER

School of Pharmacy Dean Arthur Nelson, Ph.D., has announced that he will be retiring this summer from his leadership role with the school.

Selecting his replacement will be a 15-member search committee appointed by TTUHSC President Tedd L. Mitchell, M.D., comprised of representatives from each of the school's four campuses. The executive search firm Witt/Keiffer, whose hiring was approved in December by the TTU System Board of Regents, will assist in the search.

The committee has begun to review candidate applications and plans to make a decision by July 2012, said TTUHSC Executive Vice President and Provost and School of Medicine Dean Steven L. Berk, M.D.

Nelson joined TTUHSC in 1994 to lead the process of planning and establishing the TTUHSC pharmacy program. He also led the school through expansions to the Lubbock, Dallas and Abilene campuses. Under his leadership, the school has experienced a significant increase in research through NIH and other funding as well as developed innovative academic programs.

## CANCER RESEARCHERS RECEIVE SHARE OF CPRIT DOLLARS DURING LATEST FUNDING CYCLE ::

Congratulations to the TTUHSC cancer researchers who received \$5.7 million in funding in November from the Cancer Prevention and Research Institute of Texas as part of their latest grant cycle.

Those receiving funds include:

- RICHARD LEFF, Pharm.D., regional dean, School of Pharmacy at Dallas/Fort Worth, \$2.5 million
- ZEINA NAHLEH, M.D., associate professor, Department of Internal Medicine, Paul L. Foster School of Medicine in El Paso, \$1.5 million
- MAGDALENA KARBOWNICZEK, M.D., Ph.D., associate professor, School of Pharmacy at Abilene, \$756,644
- QUENTIN R. SMITH, Ph.D., professor and senior associate dean for sciences, School of Pharmacy at Amarillo, \$736,685
- ULRICH BICKEL, M.D., professor, School of Pharmacy at Amarillo, \$199,967



## School of Pharmacy names new regional dean for Abilene

The School of Pharmacy welcomes Debra Notturmo-Strong, R.Ph., as its new regional dean at Abilene. She joined the school Nov. 1 after retiring from the U.S. Air Force.

Notturmo-Strong has 24 years of military service, most recently as commander of the 7th Medical Support Squadron and deputy commander of the 7th Medical Group stationed at Dyess Air Force Base in Abilene. Her responsibilities included health, welfare and morale of 108 officers, enlisted and civilian personnel in the areas of pharmacy, laboratory, resource management, medical logistics, medical readiness, information systems and patient administration.

Her military career also included a stint as inpatient pharmacy flight commander at Lackland Air Force Base in San Antonio, where she also directed the Department of Defense's only bone marrow transplant pharmacy within the Air Force. Additionally, Notturmo-Strong served as director for pharmacy operations at Lackland and was responsible for the Air Force Medical System's largest and most complex pharmacy operation.

"What I'm looking forward to most is continuing the successes established at the School of Pharmacy Abilene campus and to carrying forward the commitment and advancement of our profession," Notturmo-Strong said. "The

atmosphere in Abilene is one of warmth and friendliness, and I look forward to maintaining that environment, as well as advancing the relationships with our students, our faculty and the Abilene community."

Notturmo-Strong received her undergraduate degree from the Massachusetts College of Pharmacy. She also has master's degrees in administration, pharmacy administration and health policy from Central Michigan University and the University of Sciences in Philadelphia, respectively.

## MULTIMEDIA



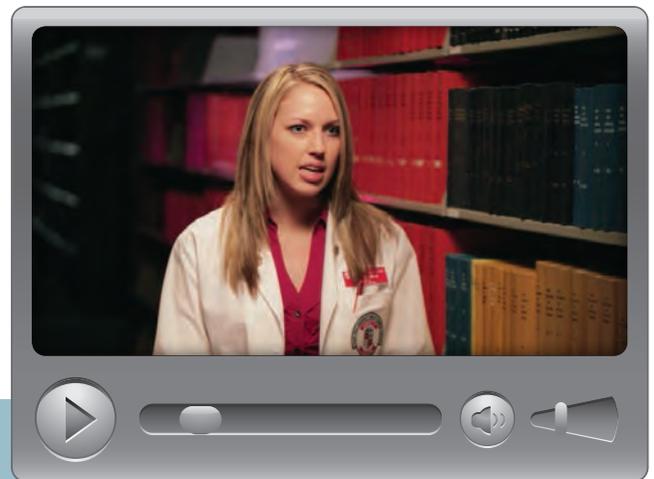
### *Bodies of steel*

Hard metal takes on the glow of life in the latest installment of the TTU System Public Art Collection. San Antonio artist Cakky Brawley created the polished aluminum luminaries that were installed in mid-October in the Academic Classroom Building Courtyard on the Lubbock campus.

“I felt that this space needed to be activated somehow in a way that would be soothing for education or relaxing in a way,” said Brawley, a 1990 graduate of the TTU School of Art. “I hope it provides energy to the area for the students, because this is such an important part of their lives.”

Each of the 8-foot luminarias features one of the body’s systems – cardiovascular, digestive, reproductive, skeletal and central nervous. At night they are lit with programmable LED lights designed specifically for this installation.

Brawley said she chose to focus on the body systems because they are universal images that speak to all health care professions.



### *Showcasing strengths*

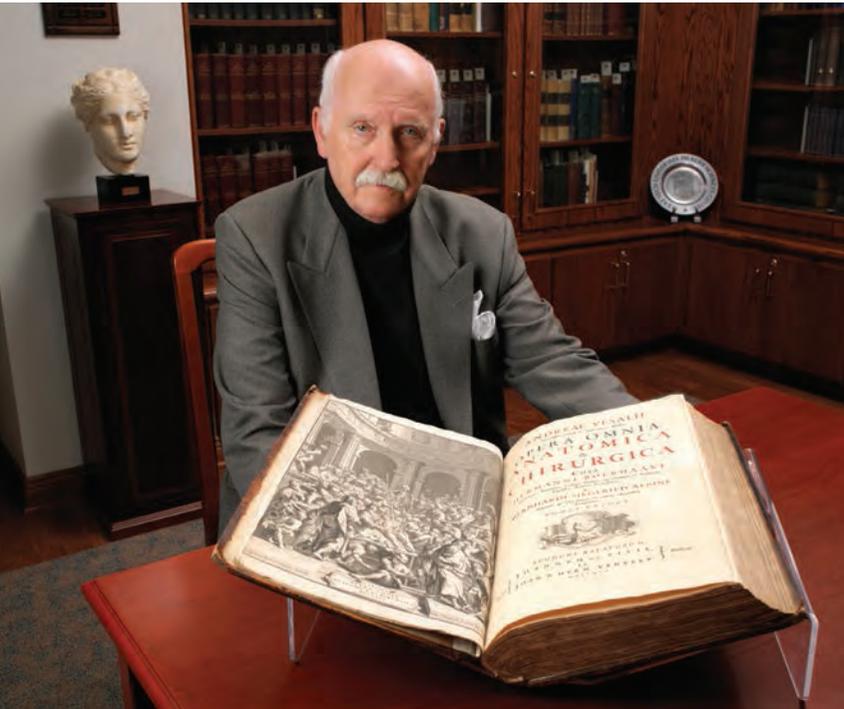
Four seconds is all Lorelei Vandiver needs to tell you why she’s here. The second-year medical student is one of several featured in a promotional video touting the School of Medicine’s strengths in educational offerings and the genuine cohesiveness among its students, faculty and staff.

“It was a place where I felt like I could succeed because of how many people are around to help me,” Vandiver states.

The school’s Office of Admissions has used the video to inform applicants during their interviews. Additionally, it is posted on Facebook and will be used as a recruiting tool, said Louis Perez, assistant director for admissions.

“We feel that we have something special to offer. From an innovative curriculum and collaborative learning environment to a warm and friendly rapport with faculty, students can receive their medical education in a setting that is devoted to optimal learning.”

## S h h h ... Rare Books Collection might be Lubbock's best kept secret

**HERE ARE A FEW SELECT TITLES FROM THE BOOKSHELVES:**

*Academicarum annotationum, liber primus [-octavus]* | Bernhard Siegfried Albinus, 1687-1704

*Eight volumes in 2, 37 leaves of plates; illustrated*

This copy was in the library of the famous French anatomist and surgeon Jules Cloquet (1790-1883). The first title page in each volume bears a small ink stamp *Bibliothèque du Prof. Jules Cloquet*.

*Explicatio Tabularum Anatomicarum Bartholomaei Eustachii* | Bartolomeo Eustachii, 1505-1574

*First Edition, edited by Bernard Siegfried Albinus; 89 anatomical plates*

The first edition of Bartolomeo Eustachii's anatomical tables were engraved in 1552 but his work was never completed; Bernard Siegfried Albinus published this second edition, which includes his own extensive commentaries. Had Eustachii's work been published at the time of their execution, he undoubtedly would have ranked with Vesalius as founder of modern anatomical studies (*Heirs of Hippocrates 201*).

*The Practice of Physick* | Lazare Riviere, 1589-1655

A collection of 17 volumes describing the nature, cause, distinctions and cures of diseases. Riviere was physician to the king and court of France (Louis XIII). Among his significant discoveries, he was the first to denote aortic stenosis.

When the pioneers settled West Texas, physicians were scarce. In fact, it was the early 1900s when the first doctor arrived in Lubbock. There was no Web MD or CNN Health. In fact, many families didn't even have a neighbor living close enough to consult in times of illness or injury. Luckily, many of them had at least one volume from the Library of Health, available for purchase through the popular Sears and Roebuck mail-order catalog.

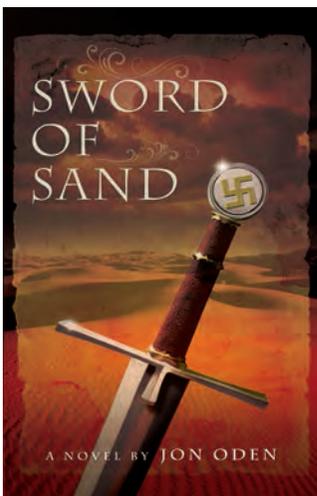
The catalogs have all but disappeared, but if you want to learn what 'doctoring' in West Texas was like at the turn of the century, visit the Rare Books Collection at the Preston Smith Library of the Health Sciences.

The 1,000-title collection, all acquired with donated funds, just might be the best-kept secret on the Lubbock campus. Nestled in its own room, the collection focuses on 20th century health care on the Plains, but also contains many noteworthy first editions including Florence Nightingale's *Notes on Nursing: What it is, and What it is not*.

"A rare books collection gives us a window into our own past," said Jane Colmer-Hamood, Ph.D., associate professor in the Graduate School of Biomedical Sciences' Department of Microbiology and Immunology. She has served on the library committee for two years. "This gives us a perspective on how far we have come and how many advantages we have in today's technologically rich world; finding and maintaining rare books keeps our heritage alive."

The collection was established 14 years ago with a gift from the Tri County Medical Society — now the Lubbock-Crosby-Garza Medical Society — to furnish a rare books room. A handful of faithful givers have helped build the collection, including Clifford L. Montgomery, M.D., and his wife, Martha, who moved to Lubbock in 1957 to establish a private practice, said Richard Wood, executive director of the library.

The Rare Books Room is open during normal library hours or by appointment. To learn more or to make a contribution, contact the library at 806.743.2200.



**SWORD OF SAND** | BY JON ODEN, M.D. (SOM '97) | 295 pp. Linus Publications, Deer Park, N.Y. \$12

Set during World War II, *Sword of Sand*, follows the adventures of American William Giles as he leads his group of well-trained, under-motivated gangsters on what seems to be a suicide mission to rescue a young man from the battles in Africa. To complicate matters, the boy he is trying to rescue happens to be a German soldier in Gen. Erwin Rommel's Afrika Korps, the German's military expedition force in Libya and Tunisia. Drawing on his passion for military history, Oden set out to create a Tom Clancy adventure-type series that would engage, entertain and educate young people. As a pediatric endocrinologist at Children's Medical Center in Dallas, Oden spends a great deal of his time helping children with diabetes battle the disease to keep it from interfering with their life adventures. A diabetic himself, Oden spends part of his summer months working at Camp Sweeney, a camp north of Dallas for children who have diabetes, where he wrote and edited *Sword of Sand*. Oden lives in Plano with his wife, Leslie, and their three daughters.

**KUDOS** **NORMA P. FERNANDEZ, PH.D., M.P.H.**, a researcher in the Paul L. Foster School of Medicine Department of Family and Community Medicine, has received one of 23 Minority Scholar in Cancer Research Awards presented by the American Association for Cancer Research. Fernandez's work involves comparing perceptions of colorectal cancer among Hispanic populations. The awards is intended to enhance the education and training of minority researchers and increase the visibility and recognition of minorities involved in cancer research. The Department of Family and Community Medicine at the Paul L. Foster School of Medicine at El Paso has received a five-year \$945,000 Pre-Doctoral Training in Primary Care award from the Health Resources and Services Administration. The award will fund a project to enhance the family medicine clerkship with interactive web classes focused on border health and will expand the number of longitudinal electives offered during the clerkship. The **DELTA PI CHAPTER OF KAPPA PSI PROFESSIONAL PHARMACEUTICAL FRATERNITY** has been named the William R. Smith Most Improved Chapter. The TTUHSC chapter was selected from the 82 Kappa Psi collegiate chapters as having the most significant improvement during the last year. **PAT ALLEN, ED.D.**, and **SHARON DECKER, PH.D., R.N.**, were selected from among 142 nursing leaders nationwide for the prestigious honor as fellows in the American Academy of Nursing. Allen, professor and director of the Center for Innovation in Nursing Education addresses nursing workforce challenges through innovative approaches to education. Decker, professor, Covenant Health System Endowed Chair in Simulation and Nursing Education and director of the F. Marie Hall SimLife Center, promotes quality, safe patient care through simulation education. The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) at the National Institutes of Health has appointed **RICHARD LEFF, PHARM.D.**, to the U.S. Pediatric Formulation Initiative Task Force. Leff, regional dean for the School of Pharmacy at Dallas/Fort Worth, will serve on the biopharmaceutics working group. **REBECCA SLEEPER, PHARM.D.**, and **BRIAN IRONS, PHARM.D.**, associate professors in the School of Pharmacy's Department of Pharmacy Practice at Lubbock, have been recognized as fellows by the American College of Clinical Pharmacy. The college awards fellowship status to members who have demonstrated a sustained level of excellence in clinical pharmacy practice and/or research. The American Association of Poison Control Centers has voted unanimously to extend accreditation of the Texas Panhandle Poison Center (TPPC) for five years. **JEANIE JARAMILLO, PHARM.D.**, (SOP '01) School of Pharmacy assistant professor, is managing director.

## LAURA STREET TO LEAD LWBIWH



Laura Street had successful careers in physical therapy and nursing before transitioning into nonprofit management. Then she led an ambitious Amarillo assemblage to raise \$33 million – at the time, the largest fundraising project in the Panhandle history – and build a state-of-the-art performance hall for the Amarillo region.

And now she is putting her expertise to work for the Laura W. Bush Institute for Women's Health.

Street began Sept. 1 as the institute's new executive director, replacing Marjorie Jenkins, M.D., founding executive director, who is now LWBIWH's chief scientific officer. Jenkins also will serve as the institute's regional director at Amarillo. In addition, Jenkins is facilitating inclusion of gender-based medicine in medical school curriculum that will teach future physicians about gender differences in medicine. She also will be involved with recruiting NIH-funded researchers and integrating their work with clinical and educational offerings.

"The things that have happened the first four years with Dr. Jenkins were exactly what should have happened," said Street. "She has done a fabulous job creating and developing a vision so that others could understand it and embrace it."

Now, Street's job will be to guide the institute as it moves to a more global platform. She has for years been a surrogate to TTUHSC's efforts in women's health. In the mid-90s, Street was seeing patients

as a nurse practitioner and helped establish a women's health clinic in Amarillo that is now housed in the Obstetrics and Gynecology clinic at the School of Medicine at Amarillo. Before that, as a registered physical therapist, Street introduced exercise to expectant mothers during childbirth education.

While at the helm of the performing arts center, she continued to follow the development of women's health and became a proponent of Jenkins' work. Street helped lay the foundational groundwork for the LWBIWH and has served as an underwriter and co-chair for its signature charitable event in Amarillo, Power of the Purse.

Street envisions each campus having its own signature event to support research, education and outreach efforts, and as a whole, the institute will continue to further the knowledge of women's health and gender-based medicine in order to promote better health care for everyone. (*See Lubbock's Little Black Dress on page 9.*)

The LWBIWH already has many of the key components in place, Street said.

"Our biggest challenge (moving forward) will be to see how well we can gather our resources and figure out our real niche and go forth in the world and really make a difference," Street said.

## JOINT VENTURES HELP FOSTER SOM ASSIST EL PASOANS BATTLING CANCER

A cooperative agreement announced this summer between the Paul L. Foster School of Medicine and one of the largest groups sponsoring clinical trials supported by the National Cancer Institutes provides the opportunity for El Paso cancer patients to participate in nationwide clinical trials.

The agreement with Southwest Oncology Group was facilitated in part by Zeina Nahleh, M.D., who joined the school about six months ago. Nahleh is an associate professor and chief of the Division of Hematology/Oncology in the Department of Internal Medicine and co-medical director of the University Breast Care Center. She also is a nationally recognized expert in the treatment of breast cancer and is a national principal investigator for the Southwest Oncology Group's nationwide study on the treatment of locally advanced and inflammatory breast cancer. Nahleh also serves on the group's Board of Governors.

The initial trials for El Paso patients will focus on breast, lung and colon cancers.

Also, the Paul L. Foster School of Medicine's Department of Family and Community Medicine and the Center of Excellence in Cancer received a three-year \$2.7 million grant from the Cancer Prevention and Research Institute of Texas to help reduce the burden of colorectal cancer among El Paso County residents.

The grant will support the Against Colorectal Cancer in Our Neighborhoods project (ACCION), a collaboration involving more than 20 academic and community-based organizations throughout El Paso County. The project's goal is to reduce the burden of colorectal cancer through awareness and knowledge about the disease and to provide access to no-cost screenings and other diagnostic tools as well as treatment services for eligible underserved and uninsured residents.

## Former first lady applauds TTUHSC efforts to improve women's health

Women's health issues do not respect national boundaries; so neither should TTUHSC's efforts in advancing health care. That was the message by Laura W. Bush during a visit to Lubbock in October to support the institute that bears her name.

During the past four years, Mrs. Bush noted the Laura W. Bush Institute for Women's Health has expanded its research and educational endeavors, taking on some of the most pressing health care problems facing women: breast and ovarian cancer, Alzheimer's and cardiovascular diseases and the aging process.

Now it's quickly becoming a national voice in gender differences as well, she said. Mrs. Bush was referring in part to the work by Marjorie Jenkins, M.D., chief scientific officer and regional director in Amarillo for the LWBIWH, in developing a curriculum for medical schools that will teach gender differences.

"The LWBIWH is the only university research center in Texas that uniquely focuses on solving a broad spectrum of women's health issues," Mrs. Bush said. "We know that women and men were created equally, but when it comes to health, research shows that gender difference greatly affects the medical diagnosis and treatment for men and women."

Simple things such as understanding that aspirin is beneficial in preventing heart attacks in men, but not in women are critical components, for example, in the



### *Lubbock's Little Black Dress*

Wool, crepe, satin or velvet; short, sleeveless, pleated in chiffon or all-over black lace. There's nothing that says "this woman has it all together" like the little black dress, and nothing says women's health like the Laura W. Bush Institute for Women's Health.

"Lubbock's Little Black Dress" will make its debut next fall as the signature event for the Lubbock campus of the LWBIWH.

Janet Tornelli-Mitchell, M.D., TTUHSC's first lady, made the announcement in October at the conclusion of a visit by Laura W. Bush.

Tornelli-Mitchell connected the versatility of Coco Chanel's timeless fashion to that of the LWBIWH, saying women's health will never go out of style.

management and prevention of cardiovascular disease.

In coming years, the LWBIWH will have an impact on the way research is conducted, taking into consideration the biological and physiological differences between women and men and influential in developing medical care that understands and acknowledges these differences.

"I appreciate the work of the LWBIWH to ensure that medical professionals are better prepared to account for gender differences when treating all patients," Mrs. Bush said.

She also discussed the worldwide initiatives she has taken on through the Global Health Initiative at the George W. Bush Presidential Center, and the opportunities through LWBIWH for improved health for women not only in West Texas but across the state, nation and around the world.

# JUST *the facts...*

## 1975

is the date on the first master's degrees awarded by the Graduate School of Biomedical Sciences (GSBS). Originally part of the School of Medicine, GSBS gained status as a separate school in 1994, and today offers graduate programs in biotechnology, biomedical sciences and pharmaceutical sciences.



## 3D

is not just a cool way to watch movies. The 3-D visualization simulator room at the F. Marie Hall SimLife Center combines cadaver dissection with the technology of virtual reality. The program offers students more than 2,000 identified structures providing a unique ability to approach the human body from any multiple combination of views, including cross sectional 2-D views and 3-D systemic, surface and regional anatomy. The simulation program, developed by a team of scientists at the University of Colorado, is based on the National Library of Medicine's Visible Human Project.



## 82

of the 511 graduates from the School of Nursing in 2011 were Hispanic. The school ranks fifth out of 15 schools conferring the most bachelor's degrees in nursing for Hispanic graduates, according to the National Center for Education Statistics.

## 1 in 5

Americans living in rural communities are faced with unique health care challenges. The F. Marie Hall Institute for Rural and Community Health is working to meet the needs of those in West Texas through innovative research, educational programming and technological advancements.



## 1,500

square feet of laboratory space at the Dallas/Fort Worth regional pharmacy campus is home to the Pediatric Pharmacology Research and Development Center. The center was established in 2004 to increase the safe and effective use of medications in infants and children. It also is the core laboratory for drug development for the North and Central Texas Clinical and Translational Science Initiative led by the UT Southwestern Medical System.

## New department creates emphasis on population health

With the addition of a new Department of Public Health, TTUHSC has the opportunity expand its current emphasis in health care education, research and patient care to one that includes health prevention for populations.

“We believe it will be a program of interest to students and faculty, both as an offering of an advanced degree and for the opportunity to conduct research in public health arena,” said Rial Rolfe, Ph.D., M.B.A., senior vice president for academic affairs.

The search for the department’s founding chair began in early December; the timeline for admitting students will depend on when the position is filled, Rolfe said, adding that classes could begin as early as fall 2012.

The Department of Public Health, to be housed in the School of Medicine, will provide opportunities for university-wide interdisciplinary collaboration among students and faculty from all schools for enhancing public health teaching and research to study factors that impact population health.

The concept is one that has been discussed among TTUHSC administration for more than a decade, and it was a priority brought to the forefront by President Tedd L. Mitchell, M.D., who came from an institution grounded in evidence-based prevention.

“This is something that most medical schools have,” Mitchell said. “But more importantly, it opens up a number of opportunities for us to address questions such as why the death rate is higher for those in rural areas who have cancer, heart disease, chronic bronchitis and Alzheimer’s. We suspect it’s because they do not

seek treatment or are not diagnosed as early compared to those in more urban areas, but that’s never been studied.”

This new department, he added, will provide that opportunity.

Rolfe said the data to study public health issues is readily available through existing medical records and a number of TTUHSC faculty have public health experience, but “we have not focused on bringing together these resources in a way that can be used to identify preventative measures,” Rolfe said.

The person filling the founding chair position will help develop the curriculum for a Council on Education for Public Health (CEPH) accredited Master of Public Health program. The long-range plan is to establish a CEPH accredited School of Public Health and expand the degree offerings to include a Ph.D., and then possibly, a certificate program, Rolfe added.

According to the Association of Schools of Public Health website, there are 49 CEPH-accredited schools of public health in the United States; three of those are in Texas at the University of North Texas Health Sciences Center, Texas A&M University Health Sciences Center and the University of Texas, which offers a dual MD/MPH degree to students at the Paul L. Foster School of Medicine.

Rolfe says there is no immediate plan to dissolve the current joint MD/MPH degree offered through the Paul L. Foster School of Medicine and the University of Texas, “but we’d certainly hope our students in El Paso would find that ours will meet their needs.”

## Student Service

We have many goals that we hope to accomplish this year to improve student life, including going mobile. We are in the process of improving our mobile web for portable devices. With students on the go, this will grant much more accessibility to school items when they don’t have access to computers.

Also, we are continuing to improve communication with regional campuses. We are blessed to have many campuses, but it does create a communications challenge. It is critical that we constantly pursue making these connections better as every campus is an integral part of our system and brings a unique facet to our community.

Along with improving communications, we are seeking to make the SGA more visible to the students. We are looking to improve the students’ understanding of us as well as get them involved in the service opportunities and social events that we have to offer.

Service is an important part of the health care field, and we see it fitting that our students should actively be participating in service now. We have already had our first service event at Habitat for Humanity and are looking forward to our future opportunities.

Calvin Bradley  
President, TTUHSC Student Government Association



*Student Government Association Executive Officers: Calvin Bradley, president, second year — medicine; Ashley Davidson, vice president of communications, second year — occupational therapy; J.R. Ford, vice president of finance, second year — medicine; and Camille Vincent, vice president of operations, second year — speech language pathology.*

## INAUGURAL CLASS AT EL PASO MEDICAL SCHOOL MAKES SUCCESSFUL FIRST STEP ::

The results are in, and the Paul L. Foster School of Medicine Class of 2013 has proven innovation works. Students chalked up a first-time pass rate of 97 percent and an average score of 225 on the Step 1 of the U.S. Medical Licensing Exam (USMLE), taken in July.

“This is a major accomplishment for the students and for the faculty who have worked hard to develop and implement our curriculum,” said David Steele, Ph.D., senior associate dean for medical education and director of curriculum, evaluation and accreditation.

*“The excellent showing of our students is a testament to their hard work, perseverance, intelligence and preparation. They enrolled in a brand new medical school without a track record of success, established a record and set a high bar for the classes that follow.”*

Historically the pass rate for Step 1 is about 92 percent and the average score is between 219 and 221. USMLE is a three-part national examination that is required for licensure in the United States. The first part assesses foundational knowledge in the biomedical and behavioral sciences required to practice scientifically informed medicine. The Paul L. Foster School of Medicine requires students to take the exam before entering the third year of the curriculum; they must pass the test before progressing to the fourth year.

“Ultimately, the student’s performance on Step 1 is a reflection of their tremendous dedication and potential,” said Richard Brower, M.D., chair of medical education at the Paul L. Foster School of Medicine. “Implementation of our new and innovative clinical presentation-based curriculum was an enormous challenge, and it is great to see such positive results so early in our development.”

## Guess WHO



NEAL HINKLE

### CLAUDE LOBSTEIN DIRECTOR, WILLED BODY PROGRAM SCHOOL OF MEDICINE, LUBBOCK

Claude Lobstein meticulously writes a name, a time of death, the next of kin on one half of a sheet of white copy paper. There is a stack of these halves within arm’s reach of his phone, seemingly prepared for this very purpose. An iMac sits on the corner of Lobstein’s desk and behind him an IBM typewriter — but some things just need a personal touch.

That’s what Lobstein wanted to bring to TTUHSC when he came in 1973 to begin its Willed Body Program. Lobstein left his job as a mortician at Sanders Funeral Home in Lubbock to join the new medical school.

In the early years, he often spent entire class periods with the students and knew many of them personally. They celebrated many holidays as one big family, Lobstein said, recalling how he and Bernell K. Dalley, Ph.D., former associate professor of anatomy professor and then associate dean for admissions and minority affairs, would play the role of Santa and Mrs. Claus at the annual TTUHSC Christmas party.

Now, at the annual memorial services held to honor those who have donated their bodies to science, Lobstein hardly recognizes any of the students who come to pay their respects. As the medical school grew into a health sciences center, the demands of managing the Willed Body Program increased, too. In addition to its own anatomy classes, TTUHSC also provides cadavers for other educational purposes including the annual symposium sponsored by the School of Medicine Department of Anesthesiology and for various manufacturers to test new medical devices and other institutions including the Paul L. Foster School of Medicine and William Beaumont Army Medical Center in El Paso and for Angelo State University’s allied health program.

There is a delicate balance meeting these instructive needs and honoring the altruistic wishes of individuals, Lobstein says. But his approach is one of reverence and respect, and that he says will never change.

# Discoveries

RESEARCH  
& SCHOLARLY  
ACTIVITY



A wireless device, small enough to fit in the palm of your hand, may hold the key to understanding risk factors that contribute to falls in vulnerable populations. To get the study underway, the team of multidisciplinary researchers have enlisted the assistance of another group of experts.

# Research Assistant

Institute provides support services that help clinical faculty with investigations

*Tam Nguyen, M.D., assistant professor of head and neck surgery in the School of Medicine, and Steve Zupancic, Au.D., Ph.D., ('03, '07) assistant professor of speech-language and hearing sciences in the School of Allied Health Sciences*



NEAL HINKLE

BY DANETTE BAKER

The wireless device Steve Zupancic, Au.D., Ph.D., (SOAHS '03, '07) holds in his hand may hold the key to identifying why some people fall. The highly innovative device — developed by a team of multidisciplinary researchers — combines the capabilities of a gyroscope and an accelerometer, but is small enough to be easily worn by a human volunteer. It will be used as part of a new study to gather data that can help identify risk factors that contribute to falls in patients with compromised balance.

The research team is comprised of Zupancic, assistant professor of speech-language and hearing sciences in the TTUHSC School of Allied Health Sciences; Tam Nguyen, M.D., assistant professor of head and neck surgery in the TTUHSC School of Medicine; and Donald Lie, Ph.D., Keh-Shew Lu Regents Chair and associate professor of electrical engineering at the TTU Whitacre College of Engineering.

Ready to begin their study, the trio turned to the experts in the Clinical Research Institute for assistance in obtaining approval from the Institutional Review Board. All studies involving humans must have approval from the IRB, a board whose sole job is to protect humans who take part in research. Securing approval is not a complicated process but can postpone the start of a study if the researcher is not familiar with such applications, said Catherine Lovett, M.S.N., R.N., CCRC, (SON '08) managing director of the Clinical Research Institute.

“The purpose of the IRB application is to clearly explain to the IRB your study plan, also known as your protocol. You are answering questions using information from your study protocol. If the answer isn't in your protocol then you know you need to insert it. So the key is having a well-written protocol. That is actually the true challenge; developing a scientifically sound protocol.”

The institute provides resources to TTUHSC faculty beginning with pre-study activities and study conduct, through study completion, including publication and/or preparation for conference presentation. In addition, the office actively markets the institution's clinical trial capabilities and networks with all TTUHSC campuses to facilitate cross-campus collaboration on potential clinical trials.

The concept of support for clinical faculty dates back to 2001 when the TTUHSC Division of Clinical Research was established to assist clinical faculty interested in conducting research with industry-sponsored drug trials. In 2009, School of Medicine Dean Steven L. Berk, M.D., converted that office into the Clinical Research Center within the school. The center's primary mission was supporting the clinical faculty to conduct investigator-initiated research, important for continuing approval of residency programs, faculty promotion and recognition of the school. In 2010, TTUHSC President Tedd L. Mitchell, M.D., elevated the center to an institute, emphasizing the need for an increase in research activity from all schools and to facilitate interdisciplinary studies.



CHRIS BARNARD

Lorenz Lutherer, M.D., Ph.D., ('77) executive director of the Clinical Research Institute, and Helen Wang, second-year medical student



Susan Doctero, B.S.N., C.C.R.N.,  
 coordinator for the Clinical Research Institute

“Historically the mission of this institution was, and still is, education; but there is a perception that is all we are, despite the fact that we’ve had pockets of very successful research,” Mitchell said. “We need to change that perception so that we are seen as strong in research as we are in education.

“To do that, we need more of our faculty doing the research and publishing in peer-reviewed journals and presenting at national and international conferences to develop that reputation.

“Yet, we can’t ask our faculty to do that without the right support.”

Balancing research studies and clinical obligations can create a perfect storm in an academic health institution. Time constraints are one of the greatest challenges, said Lorenz Lutherer, M.D., Ph.D., (SOM ’77), executive director of the Clinical Research Institute and a long-time School of Medicine faculty member in the Department of Cell Physiology and Molecular Biophysics. Clinical faculty carry a full-time load — seeing patients and teaching — leaving little time to do research. Additionally, most were only trained to become practitioners and have minimal background in research, making it seem somewhat overwhelming on several levels, he said.

“The availability of the Clinical Research Institute and its staff to help in the design and conduct of studies provides an opportunity that was not present before for many faculty to do research,” Lutherer said.

For those like Zupancic and colleagues who are experienced researchers, the institute becomes ancillary staff. Zupancic and Nguyen routinely see patients in clinic who have compromised balance, which can become a health hazard especially among the aging population. Falls often result in hip fractures that can in turn further exacerbate risk factors for falling. Teaming up with Lie, who also is an adjunct professor in the School of Medicine’s Department of Surgery, the trio determined that by monitoring these patients that are at greatest risk for falls, they can identify ways to help prevent them and/or teach their patients ways to fall safely to minimize serious injuries.

They developed the monitoring device to be worn by the patient, but when it came time to submit the IRB application, consulting the experts just made sense, Zupancic said. “Doing this on our own would be a less efficient use of time. We all have done research, and we could do the legwork but because they deal with these on a daily basis, they are able to review the proposal and look for points of contention that we can correct before ever submitting it to the IRB.”

Once their study is complete, Zupancic said the group plans also to utilize the statistical consultants available through the institute for data analysis in order to expedite presentation or publication of the data. Having such assistance is helpful to an independent researcher, Zupancic said, because the time it requires to compile and do the appropriate data analysis is not always available.



Their study is one of 24 to have assistance from the institute in the past year; a number of others are in the planning stages, Lutherer said. Additionally, the institute continues to work on the studies initiated before the transition. In total, there are almost 100 studies in various stages of the research process. These studies involve clinical faculty, graduate faculty, residents and students, Lutherer said.

Already, there is a great deal of variety among the studies being conducted, including research on sinus node dysfunction, sleep apnea, therapeutic hypothermia and influenza. The institute is also assisting with 10 studies in the Timothy J. Harnar Burn Center at UMC Health System in Lubbock. These studies involve faculty from the School of Medicine Department of Surgery and from the School of Nursing as well as nursing staff employed by the hospital. One study, Lutherer cited, is a FDA Phase 2 clinical trial sponsored in part by the Department of Defense that is testing the development of a novel way to promote growth of new skin over a burned area. As an unplanned extension of the study, co-investigators John Griswold, M.D., professor and chairman, and Sharmila Dissanaik, M.D., assistant professor, both in the Department of Surgery, received through the institute FDA-approval for compassionate use of the skin growth technique on a premature infant, being treated in UMC's Pediatric Intensive Care Unit.

"Thus far, the number of studies being done with support from the Clinical Research Institute has far exceeded expectations, and the number continues to grow," Lutherer said. "Importantly, progress is being made not only in increasing the number and variety of studies being done in each school but also in fostering cooperative studies between faculty of different schools and multiple campuses.

"In conjunction with its support role, the institute has developed a number of educational programs for students, which soon will be available in all schools on all campuses."

Eventually the institute will expand and have offices on multiple TTUHSC campuses, Mitchell said, adding that Amarillo will more than likely be the first step in expansion as the School of Medicine there began a similar initiative in 2006 (featured in the Winter 2007 issue of Pulse). The addition of biomedical sciences to the Paul L. Foster School of Medicine at El Paso will make a seamless transition to that campus as well, Mitchell added.

Another piece to enhancing the institution's research presence began this year with implementation of the new Department of Public Health in the School of Medicine at Lubbock. (See story page 11.) The first students could be admitted to the program in fall 2012, and within the next five to 10 years the department will become a School of Public Health. The Clinical Research Institute will play a major role in facilitating and supporting research in that school.

"We have a natural strength in our physical location to really impact population studies, particularly those unique to rural West Texas," Mitchell said. "Having not only the location, but multiple disciplines and now the research support and focus on public health really opens some doors for the future."

## CANCER INTERVENTION

Tuberous sclerosis complex (TSC) is a rare, but often lethal, genetic disorder characterized by the development of multisystem non-cancerous tumors in the brain, skin, lungs, heart and kidneys. Currently the pharmaceutical therapies available in treating the disorder are only partially successful, which is why a research team led by Magdalena Karbowniczek, M.D., Ph.D., associate professor at the School of Pharmacy at Abilene, is looking for at novel therapeutic treatments designed to intervene in the development of the disorder. Based on their prior studies of the Notch signaling pathway, a mechanism involved in the growth of TSC tumor cells, Karbowniczek and her team are investigating ways to interrupt these tumor signals, thus stopping tumor growth. Given these pathway signals are also frequently activated in tumors not associated with TSC, the research could also impact other cancers such as glioma and metastatic breast cancer. Her work is among several studies at TTUHSC that were recently funded by the Cancer Prevention and Research Institute of Texas (See story on page 5).



Pancreatic islets, stained for insulin (red) transplanted with Sertoli cells

## DISRUPTING DIABETES

More than 2 million people in the United States have Type 1 diabetes, a condition in which their bodies no longer produce insulin. As a result, they are dependent on daily insulin treatments to control their blood glucose levels. The research team headed by Jannette Dufour, Ph.D., assistant professor of Cell Biology and Biochemistry, is particularly interested in the role Sertoli cells might have in improving transplantation outcomes. They are evaluating the use of these cells, which have naturally occurring immune functions, in improving the survival of transplanted pancreatic islets, cells responsible for insulin production. Working with animal models, Dufour's lab has successfully improved transplantation rates for a short time in diabetic rats by co-transplanting Sertoli cells with pancreatic islets. If they can determine the mechanism by which Sertoli cells create a site that is immune to rejection, they can ultimately improve the outcomes of islet transplantation as a treatment for diabetes.



## MITIGATING MEDICATION ERRORS

According to a survey at 12 U.S. children's hospitals, the rate of unsafe medication administration can be as high as 11 incidents per every 100 patients. The rates are even higher among pediatric patients in intensive care or neonatal units. But a handheld device for nurses to use at the bedside may help reduce dosing errors. Karen Esquibel, Ph.D., R.N., C.P.N.P.-PC, (SON '96, '02) assistant professor in the School of Nursing, is working with researchers from the University of Michigan to

evaluate the effectiveness of the device that allows the nurse to calculate medication dosages at the patient's bedside for intravenous and other liquid medications. The device, Esquibel explained, provides critical administration information and allows the nurse to check the dosage amounts against a library of ranges considered safe for therapeutic drugs. "We are looking at the user acceptance, satisfaction and compliance rates associated with the intervention as well as the impact the device makes on clinical work," she said. The research is funded by the Department of Defense Telemedicine and Advanced Technology Research Center.

# THREE'S COMPANY

*After 30 years and a string of careers, former nursing classmates are now writing a new chapter in their alma mater's history*

BY HOLLY KITTEN



**THIRTY YEARS AGO**, three women came to Lubbock to begin their education at a new facility – the TTUHSC School of Nursing.

Although they came from different backgrounds and experiences, they shared a common interest in taking care of people.

Ann Hagstrom, M.S.N., B.S.N., (SON '86) said she developed the passion from her mother, who also was a nurse. “She loved nursing,” Hagstrom said, smiling. And Hagstrom loved the exciting stories her mom would bring home at the end of each shift.

For Vicki Johnson, Ph.D., M.S.N., B.S.N., (SON '84, '90) taking care of people was second nature, even when she was too young to have people to take care of. “I operated on all my dolls,” she said. “I loved hospitals. I was just fascinated.”

Capt. Jan Rose, M.S.N., B.S.N., (SON '84) said she never thought of becoming anything else.

Their early childhood dreams led the three women's paths to cross when they each enrolled as nursing students. Hagstrom and Rose

were in the School of Nursing's inaugural class, which had about 75 students; Johnson enrolled the following year in the RN to BSN program. The women were classmates but for a brief time as they earned their degrees and then left the School of Nursing to pursue their individual careers.

But their paths would one day cross again.

Rose's goal was to graduate a year early to join her husband who had been transferred in his job. That meant taking 29 hours for the last two semesters to finish by 1984. She later earned a master's degree at Texas Woman's University, and then served in a variety of administrative nursing positions in hospitals and clinics in Abilene, Wichita Falls, and Round Rock.

In 2006, Rose deployed to Iraq. A member of the U.S. Army Nurse Corp, she was assigned to a Provincial Reconstruction Team as the health advisor to the Iraqi government. Her mission was to re-establish health care for the people in the Diyala Province; and after

Capt. Jan Rose,  
M.S.N., B.S.N., (SON '84)



a year, Rose said they succeeded. Through her work experiences, Rose came to believe that nurses are the best-prepared group of people to face changes in the world.

“You are limited only in your definition of the boundaries of your community,” she said.

Johnson also graduated in 1984 but stayed in the Lubbock community to work. She said she enjoyed the faculty at TTUHSC so much, that after serving as a head nurse at Methodist Hospital (now Covenant Health System), she decided to pursue a career in academia. “I thought, ‘It would be nice to be able to teach and do patient care’ because it’s kind of the best of both worlds.”

So, Johnson returned to TTUHSC for her master’s degree. During the next eight years she taught for the School of Nursing, while working on her doctorate through a collaborative program between TTUHSC and the University of Texas Health Sciences Center School of Nursing in San Antonio.

While Johnson was on TTUHSC faculty, the University of Alabama School of Nursing at Birmingham recruited her to teach in their nurse practitioner program. Once again, she decided to become a student as well, earning her second master’s degree in the nurse practitioner program, encouraged to do so by the changes in the nursing field.

“I’ve been in school forever,” she said with a laugh. “There’s always something new all the time, and I love to learn.”

Hagstrom worked as a licensed vocational nurse in the rural community of Hereford, about 100 miles northwest of Lubbock, before she came to TTUHSC to pursue her degree. Working in a small hospital provided hands-on opportunities that “fueled my passion,” Hagstrom said. Today, that type of learning is replicated in state-of-the-art simulation centers with life-like mannequins. These innovations in nursing education are indeed exciting, she says.

After graduating from the School of Nursing in 1986, Hagstrom also remained in Lubbock, working nine years for University Medical Center. She then served as a school nurse in the Lubbock and Canyon school districts while raising her four sons.

“I love nursing, but I love sharing that passion,” Hagstrom said. “It’s fun to help (students) understand stuff and to see the light bulb come on or the ideas begin to connect. You can almost see their dreams on their faces.”

Hagstrom now is the regional site coordinator for the traditional undergraduate program. She oversees the programs at campuses in Abilene and Odessa. Shortly after earning her master’s degree in 2009 from Lubbock Christian University, Hagstrom came full circle, joining TTUHSC School of Nursing as an instructor.

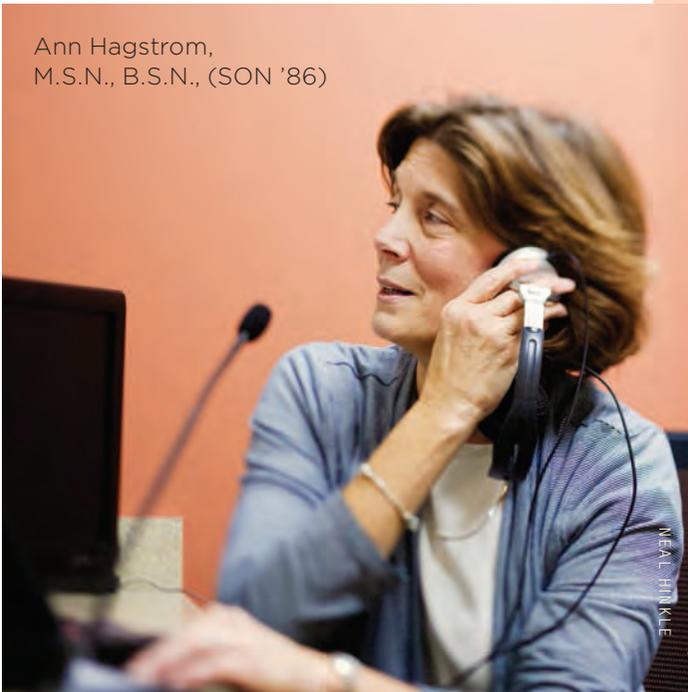
That same year, Rose had completed her service in Iraq and also returned to their alma mater. She is now an assistant professor at the Abilene campus.

Last year, the trio was once again reunited as Johnson found her way back to Texas and TTUHSC. She teaches five courses at the Odessa campus, and said she loves the small college environment.

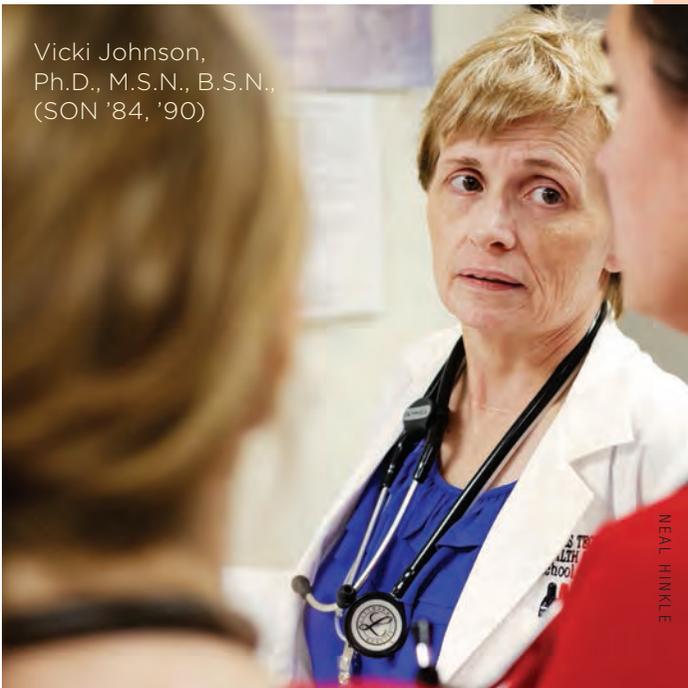
“There’s fewer students, but I get to know them,” Johnson said. “The faculty here is like family.”

Thirty years ago, Hagstrom, Rose and Johnson were those nursing students who set out on very different paths in the field, but were eventually brought back together by their like-mindedness: to share your passion about nursing is a really good thing.

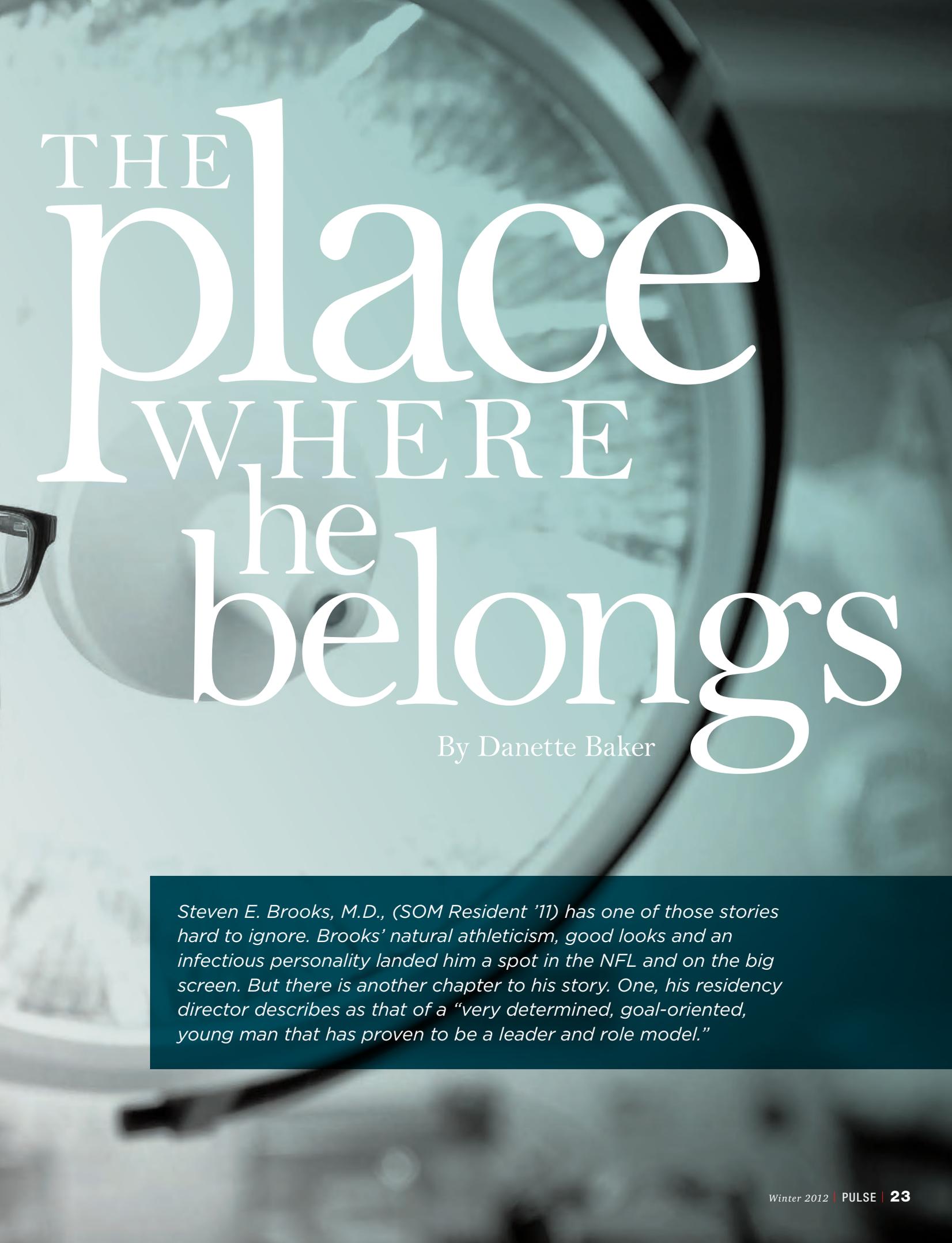
Ann Hagstrom,  
M.S.N., B.S.N., (SON '86)



Vicki Johnson,  
Ph.D., M.S.N., B.S.N.,  
(SON '84, '90)







# THE place WHERE he belongs

By Danette Baker

*Steven E. Brooks, M.D., (SOM Resident '11) has one of those stories hard to ignore. Brooks' natural athleticism, good looks and an infectious personality landed him a spot in the NFL and on the big screen. But there is another chapter to his story. One, his residency director describes as that of a "very determined, goal-oriented, young man that has proven to be a leader and role model."*

Photos provided by Steven E. Brooks, M.D.



Brooks enjoyed a dual career in the NFL and with the Screen Actor's Guild before he entered medical school.



From the first time he put on a uniform at age 8, Steven E. Brooks, M.D. (SOM Resident '11) always looked forward to that season tucked between summer and winter – those precious few months when he was all-consuming by “suing up, taping up, knocking people around and catching the football.”

For 19 years, football dominated Brooks' life. He played at Occidental College and then signed with the Los Angeles Rams in 1994, after the team extended an invitation to try out. Brooks' plan was to go to medical school, but instead he began a five-year career in the NFL. He was a tight end/long snapper for the L.A. Rams, San Francisco 49ers, St. Louis Rams, New Orleans Saints, and Washington Redskins and before ending up back home in Detroit, playing for his hometown Lions. Those were the best of times and the worst of times, Brooks said, enjoying hometown support of family and friends and being spoiled with his grandmother's home cooking, but struggling with the stresses that come with the game.

The time had come, he realized, to get serious about what he really wanted to do.

Brooks completed a five-year general surgery residency at TTUHSC this summer and began a two-year fellowship at Vanderbilt University. Becoming a physician was something he dreamed about since

THE TIME HAD  
COME TO GET

# SERIOUS

ABOUT WHAT HE

really  
wanted to do.

high school, and he took steps throughout his academic career to reach his goal. As a two-sport student athlete at Occidental College (he played basketball and football), Brooks majored in psychobiology and worked part time as a phlebotomist.

But getting into medical school — especially after a six-year absence from the classroom — wasn't easy. There was skepticism, Brooks said, on the part of some medical school administrators about his ability to succeed as a student; while others recognized that his professional athletic experience might be beneficial.

Brooks, however, knew that he belonged in medicine and convinced those at the American University of the Caribbean School of Medicine. Working as a phlebotomist had solidified Brooks' career goals; but even as a child, he was captivated by his mother's work as a critical care nurse and a nursing educator. In a January 2011 article for the American College of Surgeons, that he recalls visiting his mother at work and the awe he felt looking at the lights, sounds and equipment in the intensive care unit. But there was something else that drew him to medicine. Her work, Brooks describes with the lyrics from a Tracy Chapman song, "I've seen and met angels wearing the

disguise of ordinary people living ordinary lives ... filled with love, compassion, forgiveness and sacrifice."

"She never pushed me to become a doctor," Brooks said, "but she did inspire me. She still reminds me when I'm tired or stressed about the importance of my job, of 'giving service.'"

There's a certain part of that Brooks must have inherited. John Griswold, M.D., professor and chairman of surgery for the School of Medicine, says the former resident's compassion for patients was one of the qualities that set him apart from other "exemplary" surgery residents that come through the department.

Brooks does credit his parents as the inspiration for his accomplishments, on and off the field. "My father (a teacher and football coach), at 6'4" and more than 300 pounds, was comic book huge. But his imposing stature was balanced by his ability to joke and smile.

"He taught me that toughness and kindness were not mutually exclusive, thankfully, I inherited that, too."

Like many football players, Brooks dedicated his time off the field to helping others. He spoke on behalf of the NFL making presentations for charitable organizations such as the Make-

TO BECOME TRULY  
**excellent**  
at something,  
ATTAINING THE  
HIGHEST  
ability or proficiency,  
takes  
**tons of work.**

A-Wish Foundation and DARE programs and discovered he had some natural talent. After taking formal acting classes, he was accepted into the Screen Actors Guild, and came up with a positive, productive way to spend his off-seasons. Brooks landed small parts on HBO's *Arliss* and in the motion picture *Space Jam* and was also in several national commercials for companies including Federal Express and Nike. But his most memorable experience was as a character called "The Viking Optometrist" for a skit on the *Tonight Show with Jay Leno*.

"It was a bit surreal to be in front of a national television audience holding a broadsword and eye chart and wearing nothing but a loincloth."

It now seems that Brooks has a stellar third career ahead of him. During his residency, he was recognized almost a dozen times for his dedication to his own education as well as for being an inspiration to others. In addition to the accolades earned locally, Brooks was named by the American College of Surgeons as 2010 Resident Award for Exemplary Teaching.

"Steve has a sixth sense about teaching and specifically motivating adults to learn," said Griswold. "His teaching style instills confidence and motivates those he is working with. His personality draws in students and makes them feel comfortable with him and the topic being discussed. He is incredible at 'thinking out loud' as he performs tasks, a skill so important when teaching in a technical field like surgery."

It is a specialty, Brooks says, that he finds enjoyable in the physical and mental demands and pronounced treatments. "Artists and musicians describe a loss of time sense when they are working and creating. I have always had that same feeling of 'unperturbed awareness' in surgery."



*Steven E. Brooks, M.D., with members of the surgical critical care team at Vanderbilt.*

Upon completing the acute care surgery fellowship at Vanderbilt, the plans are for Brooks to return to TTUHSC, something Griswold says will benefit the university and the residents of this area.

Acute care surgery consists of trauma surgery, surgical critical care and emergency general surgery. Griswold explained how physicians with the specialty training care for patients with non-traumatic emergent and urgent surgical diagnosis. This would include those with bowel obstructions, appendicitis and inflamed gallbladders to name a few, he said.

Traditionally, general surgeons often care for these patients by trying to work them in amongst their elective practice, he said. “This focus of acute care surgery allows for a more efficient way to deal with these patients affording better outcomes.”

There currently are no such specialists in the West Texas region, and that’s one of reasons Griswold looks forward to Brooks’ return. Not only will patients benefit, but students will as well.

Griswold and Ari Halldorsson, M.D., School of Medicine residency program director, speak highly of Brooks’ natural teaching abilities and ability to impart knowledge. Halldorsson mentions as example, an interaction between Brooks and a medical student after a long night on call. The medical student inquired of Brooks how he was able to be so enthusiastic when teaching even when it was obvious that he too was exhausted. Brooks’ reply: “Because teaching is the part of my job that I love the most.”

For those who were skeptical, Brooks has confirmed that he belongs in medicine, and that the lessons learned through professional sports are applicable in everyday life.

“To become truly excellent at something, attaining the highest ability or proficiency, takes tons of work. So much so that, in competition or in comparison, the ‘winner’ is often the person willing to suffer or endure more and push their limits in practice or preparation.

“Likewise, interactions among teammates matter. This holds true in my surgical experiences as well. The trauma bay and the operating room are team environments in which the best performances occur not due to one star, but due to an organized, coordinated group of talented people who plug in and perform each of their respective jobs at a high level.”

Brooks, it seems, is on his way to another successful career.

*Pregnant or  
nursing and  
taking meds?*

*We've got an*

THE INFANT RISK CENTER DELIVERS  
RELIABLE INFORMATION ABOUT  
THE SAFE USE OF MEDICATIONS BY  
NURSING AND EXPECTANT MOTHERS  
THROUGH ONLINE FORUMS, MOBILE  
DEVICES AND, YES, THEY EVEN  
TAKE PHONE CALLS.



*fast  
(and)*

**MARIJKE VAN HOECK, A LICENSED MIDWIFE IN BELGIUM, NEEDED INFORMATION ABOUT THE SAFETY OF NITROFURANTOIN FOR A NURSING MOTHER WHOSE BABY WAS ABOUT 3 MONTHS OLD.** On a Wednesday morning in early December, she posted to the TTUHSC InfantRisk Center online forum, and Thomas Hale, R.Ph., Ph.D., had an answer: the antibiotic commonly used to treat urinary tract infections is generally safe for breastfeeding women to take if their babies are at least a month old.

For years, Hale, a pediatrics professor at the School of Medicine at Amarillo, has fielded such questions via email or by phone from health care providers and parents around the world asking about various medications ranging from antihistamines to analgesics. He is, after all, a leading expert in the field of perinatal pharmacology and the use of medications.

In July 2010, TTUHSC established the InfantRisk Center, a national call center to provide health care providers and women greater access to information regarding the use of medications during pregnancy and breastfeeding. While fielding the more than 9,000 calls received to date, Hale, the center's director, said he and the staff began to notice recurring questions about taking medications for conditions such as depression or diabetes so they added the online forums primarily as a way to streamline information to health care providers. Yet, there remained a response time that can vary depending on when the question is posted.

As of this summer, health care providers have immediate access to Hale's vast knowledge through an application for mobile devices. In July, the center launched the InfantRisk mobile application, which has a database of more than 20,000 prescription and over-the-counter medications and their safety ratings backed by Hale's years of evidence-based research.

For Kirsten Robinson, M.D., (SOM '01), assistant professor in the Department of Pediatrics at the TTUHSC School of Medicine and newborn hospitalist at UMC Health System in Lubbock, the mobile application's portability is its main benefit. Robinson has for years used Hale's book *Medications and Mother's Milk* as a resource to answer patient's nursing questions. "But I don't carry the book around with me," she said. "My phone, I do."

Each year, more than 4.3 million women give birth in the United States, and virtually all of these women will use at least one medication during pregnancy or during breastfeeding, Hale said. Knowing which medications and what amounts of them are safe during pregnancy and lactation is vital for both mom and baby's health. There are only a handful of researchers worldwide who, like Hale, study the kinetic factors of medications, including pharmaceuticals, over-the-counter and herbal remedies. He has been doing so for the past 20 years, and biennially publishes his work. *Medications and Mother's Milk*, a worldwide best-seller and one of the most trusted titles on the subject among health care providers, is now in its 14th edition and has been translated in Spanish and Japanese. Approximately 30,000 copies are bought annually, with 450,000 sold to date.

"Basically for the app, we took the information in the book and put it in an interactive format," Hale explained. "While it doesn't contain everything in the book, it's mobile and it's updated immediately as I add or change drug information online, so the provider always has the most current information that I have available."

The app, available on Apple and Android platforms, was introduced in July at the International Lactation Consultant's Conference in San Diego, Calif., and has been well-received, said Hale.

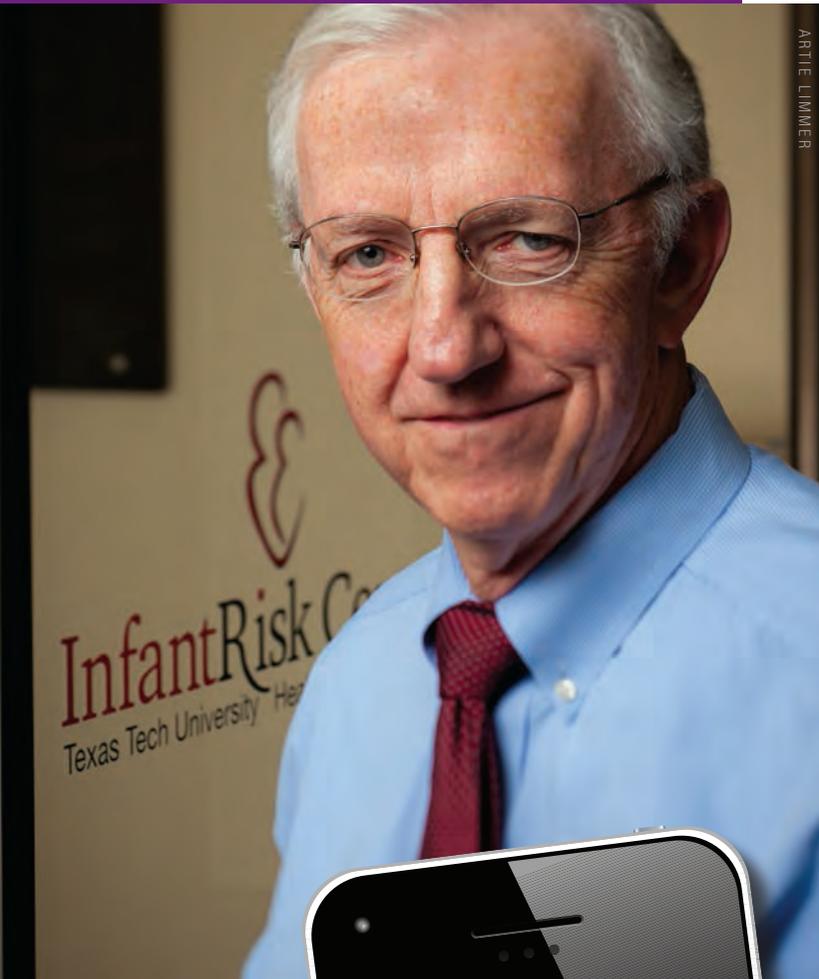
Robinson learned about the app through a TTUHSC press release. "I use the book on a daily basis, but I also take calls even when I'm not at the hospital. I like that I can look up a prescription or over-the-counter med and read it right there with the patient at the bedside."

Among the app's most useful features, she adds, is the direct dial to the call center. "I've had fantastic results getting information from their experts when I have questions about more complicated cases."

Without Hale's book and support through the InfantRisk call center and app, Robinson said the resources for lactation and medication questions are limited.

... that  
... more!

BY DANETTE BAKER



ARTIE LIMMER

Perinatal pharmacologist Thomas Hale, R.Ph., Ph.D., is director of the InfantRisk Center at Amarillo.



“There are other applications, like Epocrates, but most of those are designed for medication dosing, which is really not what I need.”

“This (InfantRisk resources) really is the best resource. It’s the most accurate and most comprehensive.”

Valeri Gatlin, a lactation consultant and childbirth educator at UMC Health System in Lubbock, also relies on Hale’s expertise.

“He’s one of the only ones I know of who’s continually researching the medications and how they can affect babies.” she said. “We have women who need to take medications but want to breast feed. His research gives us accurate information regarding medications and how they will affect their milk.”

Gatlin says she too trusts Hale’s conclusions, because his research is there to back it up.

Hale became interested in studying how medications affect breast milk after he was asked to give a lecture on the topic.

“The physiology of the milk was beautiful and there was almost nothing done about it,” he said.

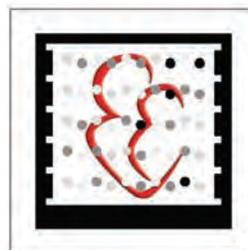
Hale uses six factors to determine the possible transfer amount of a drug across the placenta during pregnancy or through the mother’s milk in breastfeeding. Based on these factors, he developed a classification system to identify the safety of the medication and peak feeding times after each dosage.

Gatlin too keeps a current copy of Hale’s book at her desk to answer calls she receives through a breastfeeding hotline. She has also utilized the expertise available by calling the InfantRisk Center. She recently began using a smartphone and said the app will be one of her first purchases.

“A lot of times I find myself going back to the office to get the book or look something up. I’m always making copies of the pages to give to patients so I really see the conveniences of having that resource right there on the phone for them to read.”

The book, app and forums have made a significant impact in disseminating information to health care providers, Hale said, but individuals could benefit from additional tools as well. In the works, he added, is a consumer version of the InfantRisk app, MommyMeds™, which will provide information simply by scanning the bar code of a prescription or over-the-counter medication with a smartphone.

“Of course, we always encourage women to contact the InfantRisk hotline and their physicians if they have any concerns,” Hale said. “But we believe this consumer app could provide some of the basic information and give women another layer of confidence to take charge of theirs and their babies’ health.”



Learn more about the InfantRisk Center and its mobile applications by scanning the image with your mobile phone.

\*You will need to download a scanner application to your phone. Visit <http://gettag.mobi>

# Alumni

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FLIGHT DOC

## 2011 SON DISTINGUISHED ALUMNI ::

The School of Nursing selected Tamara Bavousett, D.N.P., M.S.N., C-N.P., B.S.N., ('10, '04, '01); Jeff Watson, M.S.N., R.N., ('10); and Hillery Quintanilla, B.S.N., R.N., ('98), as its 2011 Distinguished Alumni. The trio was honored in November at a dinner event, sponsored by the Office of Alumni Relations. Bavousett received the Distinguished Award for Community Advocacy; Watson was honored with the Distinguished Alumni Award for Leadership in Health Care; and Quintanilla was given the Distinguished Alumni Award for Excellence in Clinical Care. These awards are the highest honors the school bestows upon its alumni.



Texas Air National Guard pilots Col. Tommy "Astro" Duke, Larry "Warbird" Warmoth, M.D., ('92), Maj. Scott "SFTR" Elrod, Maj. Greg "Blotto" Pohoski, and Col. Phil "Shooter" Vanueau.



## FLYING HI

There is something familiar about how Larry Warmoth, M.D., (SOM '92) gives an account of the F-16 flyover before the Red Raiders hosted the Aggies in 2009: *The Goin' Band from Raiderland hit the final notes of the Star Spangled Banner right as a flock of F-16s thundered over Jones AT&T Stadium...* It's a rush, unlike no other, said Warmoth, who was pilot of the lead plane.

Remember in *Top Gun*, when Maverick kicked on the afterburners in front of the flight deck's control tower?

Warmoth enjoyed recounting the experience as he and other members of the Texas Air National Guard prepared for a repeat performance when the Aggies were in town Oct. 8.

Like Tom Cruise's character, Warmoth has hours worth of stories as a result of his time in the cockpit. Ones such as how pilots get their call signs, which is usually by doing something, well, um, memorable, he said. Since Warmoth joined the Texas Air National Guard in 1998, his comrades have called him "Warbird."

Growing up, Warmoth was mesmerized by his own father in uniform. So to follow in his footsteps seemed only natural when a Navy recruiter posed the question as Warmoth was completing his undergraduate degree in biology. He trained as a pilot, but the conversations he heard about flight surgeons intrigued him. Warmoth was completing graduate training in viral pathology at Colorado State University when he decided to go the medical route. He was familiar with TTUHSC because Lubbock then had

## SOP alumni support needed to meet scholarship goal

Students in the School of Pharmacy are embarking on another exciting year and more tuition bills. When our school first started, there were only a handful of scholarships available and certainly not enough to go around.

Fortunately, community and professional organizations, private foundations, companies, and individuals have stepped in to help provide additional scholarships, which has helped ease the mind of many students. However, more scholarship dollars are needed in order to offset increases in tuition and fees and to ultimately help every student who needs financial assistance.

Earlier this year, the SOP Alumni Association established the Alumni Pioneers Scholarship Fund. Through generous support, we have raised more than two-thirds of the \$10,000 needed to endow the scholarship, but we need your help to reach our goal.

Please consider giving today. Visit [give2tech.com](http://give2tech.com), click "Give Online" and then check the box next to the scholarship name.

Thank you in advance for your support!  
School of Pharmacy Alumni Association

Helen Cox, Ed.D., B.S.N., died July 24, 2011. She was a former faculty member in the School of Nursing, retiring in 2000 as executive associate dean and professor. Cox provided significant work toward achieving implementation of the Master of Science in Nursing degree at the School of Nursing, and she was an avid Lady Raiders fan. Memorials in her honor can be made to the Carroll Family Scholarship Fund at the School of Nursing.

Sheila J. Goodnight, M.D., (SOM '84) died Oct. 26, 2011. She was professor of medicine and chief of the Section of Pulmonary, Critical Care and Sleep Medicine at the Michael E. DeBakey VA Medical Center in Houston.

Walter Hyde Jr., M.D., (SOM Resident '86) died Sept. 18, 2011. He was a physician in Lubbock and Seminole, Texas, for 25 years.

Nancy Landry died Aug. 2, 2011. She was an administrator in the School of Medicine Department of Obstetrics and Gynecology at the Permian Basin from 1985 to 2002.

Giles McCrary Sr. died Oct. 30, 2011. He was a longtime supporter of TTUHSC and served on the board of the Texas Tech Medical School Foundation. He also was a member of the Chancellor's Council and the School of Nursing Advisory Committee.

Lloyd K. Mark, M.D., died Oct. 31, 2011. For 30 years, he was the regional chair for the Department of Radiology at the School of Medicine at El Paso and later served as clinical director in the Department of Radiology at Thomason Hospital, now University Medical Center. In retirement, he continued to advise and provide counsel to residents and students until about a year ago.

Jackolyn Benson Morgan, Ed.D., M.S.N., (SON '95) died July 10, 2011. She had served as director of nursing programs at Cisco College for several years and, in 2009, was named its dean of health sciences.

Henry T. Uhrig, M.D., died Nov. 17, 2011. He joined the School of Medicine at Amarillo in 1978, and was one of three founders of the Department of Radiology. He also was instrumental in the development of the Department of Mammography and served as medical director of mammography.

Jorge A. Fernandez, B.S.N., ('10) died Nov. 13, 2011. Fernandez, a decorated U.S. Air Force staff sergeant who served two tours in Iraq, was a nurse in the surgical intensive care unit of University Hospital in San Antonio.

*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 Fourth Street, Stop 6238, Lubbock, Texas 79430.*

## G H

an Air Force base. His first visit to the Hub City was when he and his wife, Debbie, came for his medical school interview. They left a few days later having found a home and her a job, but he still hadn't been accepted to medical school.

"Deb joked that I better get in because this was just where we were supposed to call home," Warmoth said.

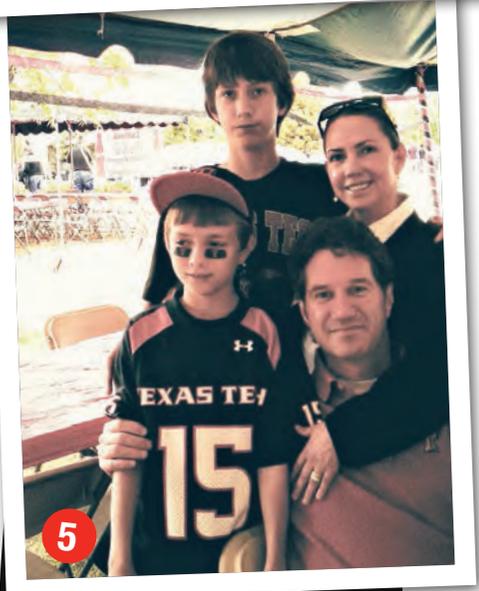
Since 1996, Warmoth has practiced in Lubbock, initially as part of Covenant Health System's medical group. He later returned to TTUHSC for a nephrology fellowship; since 2004, he has practiced at the Kidney Disease Specialists of West Texas. For the past three years, Warmoth also has served as medical director of the Kidney Center of Lubbock and chief of medicine at Covenant Medical Center.

Now a colonel in the Texas Air National Guard, Warmoth is a highly decorated serviceman as well. He has twice earned the Air Force Commendation Medal, as well as ones for meritorious service, achievement and humanitarianism. He continues to serve in the military health care field as chief of Aerospace Medicine for the 147th Fighter Wing, and he is a member of several community medical boards.

He will tell you, however, that he is most proud of his family. The Warmoths have three children: Travis, a biology (premed) major at TTU, and Tanner, who is in high school; and their daughter, Taylor, who is following in her father's footsteps. This fall, she was accepted into the School of Medicine Class of 2016.

# alumni

ROUNDS



1 The School of Allied Health Sciences hosted its annual luncheon in September to recognize and thank donors for their support in scholarship, research, educational programming and faculty development. The school now serves more than 900 students at four campuses enrolled in 18 degree programs. 2 “Welcome back” echoed across each campus during the first week of classes and to celebrate the offices of Alumni Relations and Student Services along with the Student Government Association provided lunch and giveaways. 3 New medical students receive their first set of scrubs compliments of the Office of Alumni Relations. 4 Donning of the white coat signifies the beginning of an academic career for pharmacy and medical students. Ceremonies were held in Abilene, Amarillo, El Paso and Lubbock. 5 Nothing beats a tailgate party to kickoff game day spirit. Alumni and future alumni joined the Office of Alumni Relations for burgers, hot dogs and all the trimmings before the Texas A&M game.

ALUMNI PROFILE :: **pharmacy****Jamie McCarrell, Pharm.D.,  
(’09, Resident ’11)**ASSISTANT PROFESSOR OF PHARMACY PRACTICE,  
TTUHSC SCHOOL OF PHARMACY, AMARILLO, TEXAS

## FEELING RIGHT AT HOME

BY MARK HENDRICKS

If it’s true that we can’t go home again, then life is good for Jamie McCarrell, Pharm.D. He has a home at TTUHSC. He completed a 24-month pharmacotherapy residency this summer at Amarillo and accepted a faculty position in the school’s Department of Pharmacy Practice.

“The pharmacotherapy residency program was instrumental in forming my ability to teach, both in the experiential and didactic delivery methods,” said McCarrell, who has trained in a variety of areas, but finds the multidisciplinary approach used in treating geriatric patients to be the most rewarding.

“I love working with the other medical disciplines to make sure that the patient receives the best care possible,” he explained. “The elderly population tends to take more medications than other populations, so there are more opportunities for pharmacists to be involved in therapeutic decision-making, especially when you consider that many medications function differently in the elderly population than they do in the normal adult population.”

The TTUHSC Geriatric Education Center selected McCarrell as the school’s Geriatric Teaching Scholar. During the coming year McCarrell will develop a geriatric education project to enhance learning for fourth-year pharmacy students.

“My project will seek to standardize and improve the comprehension and retention of certain areas of the (fourth-year) geriatric clerkship across all four campuses. This will hopefully be demonstrated by higher grades on the final exam.”

When he’s away from his TTUHSC home, McCarrell and his wife, Kristin, are busy at home with 2-year-old Lincoln, and Kristin’s teenage sister, who recently came to live with them. Their family hobbies include backpacking, bay fishing, softball games, playing the guitar and singing. McCarrell also mentors high school students through his church.

It’s no wonder that McCarrell doesn’t waste time worrying about going home again. He’s already there.



TEXAS TECH UNIVERSITY  
HEALTH SCIENCES CENTER  
School of Pharmacy

**Mary Hardin-Jones,  
Ph.D., CCC-SLP ('78, '79)**

PROFESSOR, COMMUNICATION DISORDERS  
UNIVERSITY OF WYOMING, LARAMIE, WYO.

## MAJOR CHANGES

BY KATE MCCUNIFF

MARY HARDIN-JONES, Ph.D., CCC-SLP, originally had her mind set on studying political science and law when she began college at Texas Tech in 1974. It didn't take her long to realize that she simply wasn't interested in either. Hardin-Jones was discussing with her mother one day her decision to change majors, and her mother mentioned a friend who was a speech pathologist.

"She thought it was an interesting field and recommended I check it out," said Hardin-Jones. "I took the introductory course in speech and hearing ... and was hooked for life."

The strong clinical background she obtained has served her well throughout her career, says Hardin-Jones. One instructor in particular, Earlene Paynter, Ph.D., helped foster her interest in cleft lip and palate. Hardin-Jones says her academic experiences also influenced her decision to pursue a doctorate and ultimately served as the foundation for her interest in cleft lip and palate.

For more than 20 years, Hardin-Jones has collaborated on studies with former faculty member Kathy L. Chapman, Ph.D., CCC-SLP, ('74, '75). Their examination of vocal development in babies and children

with cleft palate has led to a better understanding of the interaction between clefting and early speech development. Although it was once believed that a cleft palate would not influence speech production until after a child began to talk, their research has demonstrated that a cleft palate will actually influence speech sound development as early as babbling. Hardin-Jones stated that while their findings support a move towards earlier palatal surgery (prior to babbling), additional research is needed to verify that surgery performed at that time could actually prevent speech delays from occurring.

Initially challenged by how to balance clinical work, teaching and research, she says that each activity has proven rewarding in its own way. Hardin-Jones says she can't imagine what education would look like without research given the latter is the mechanism for exploration and understanding of the topics that are taught.

"As an instructor, I want my students to do more than memorize words on a page. I want them to become critical consumers that continually question the evidence base of their profession. Curiosity leads to questions, and questions lead to research."

# TECHNOLOGICAL CHALLENGES

BY HOLLY KITTEN

Sometimes it can be hard to keep up with the latest versions of the newest technology; but for STEVE WITHERS, B.S.N., it's all in a day's work.

"It used to be you kept an IV pump for 10, maybe 15 years," Withers said. "Now, they're changing so fast. It's just like your iPhone. They're obsolete in two years."

Withers provides educational training for medical professionals in hospitals throughout Texas and southern California that are transitioning to new IV machines supplied by B. Braun Medical. The company, part of a global organization with 38,000 professionals worldwide, specializes in manufacturing IV therapy equipment and dialysis machines.

As a nurse, Withers said he understands the frustrations that come with making that transition. Instead of nurses continually having to make the transition to new products, Withers said B. Braun Medical is striving to create software updates to devices, which would be more efficient for the staff.

"If you're a nurse that's worked with one particular product for even as little as three years, you become, for lack of better words, intimate with that product. You don't want to switch."

For now, Withers coordinates placement of nurses contracted by B. Braun Medical to help nurses understand the new products. Sometimes, especially with large hospital systems, training nurses in a limited amount of time can be challenging, he said. But regardless of how stressful it is for him, the nurses are the ones who ultimately feel the real pressure.

"At the end of the day, they're the ones taking care of the patients at the bedside."

ALUMNI PROFILE :: nursing

**Steve Withers, B.S.N., ('06)**

CLINICAL NURSE CONSULTANT,  
B. BRAUN MEDICAL, DALLAS, TEXAS



Rex Lee, Ph.D., ('96)

ASSISTANT PROFESSOR  
WEST TEXAS A&M UNIVERSITY  
CANYON, TEXAS

## PURPOSEFUL PASSION

BY HOLLY KITTEN

REX LEE, Ph.D., originally went to college with no career goals.

Now he's back at his alma mater hoping to inspire someone who might be walking down a similar path.

"I was one of those students who changed majors every semester," Lee said. Unable to make a decision about school, he began working as a paramedic in his hometown of Hereford, a rural community about 100 miles northwest of Lubbock. Little did Lee know that job would lead him to discover his true passion in life: teaching.

As a paramedic, Lee said he realized he finally had an interest. He wanted to pursue medicine. So, Lee went to West Texas State (now West Texas A&M) University, where he earned bachelor and master's degrees in biology.

While working on his graduate degree, Lee changed his mind again. He said he enjoyed researching for his thesis so much, that he wanted to be a research scientist. Plans changed once more when TTUHSC stepped into the picture. Lee said a recruiter from TTUHSC contacted him, and soon after, he was working with Thomas Tenner Jr., Ph.D., in the pharmacology department.

By 1996, Lee had his Ph.D., but said because of the positive influence from Tenner, he felt compelled to do something more than pharmacology.

"I wanted to have that same kind of effect on students, whether it was one student or several students."

Lee now teaches human anatomy and physiology and embryology and has received recognition for teaching excellence from students and his dean. He said he enjoys working with college students because he remembers what it was like to choose a career path and begin working in the field.

"I wanted to motivate and inspire those students and be someone that could help them achieve their dreams," he said. "I love being part of that. It's a small part, but if I can still do that much, then that's exciting to me."



ARTHE LUMMER

ALUMNI PROFILE :: **medicine**

**Melissa Houser, M.D.,  
(’89, Internship ’90, Residency ’93)**

CLINICAL DIRECTOR, PARKINSON’S DISEASE  
AND MOVEMENT DISORDER CENTER  
SCRIPPS CLINIC, SAN DIEGO, CALIF.

## MOUNTAINTOP EXPERIENCE

BY DANETTE BAKER

There’s nothing glamorous about a disease, but the high-profile attention such as that brought to Parkinson’s in 1998 by Michael J. Fox can make a disorder somewhat trendy. And that’s not always a bad thing, especially for research, says MELISSA HOUSER, M.D. “There’s a higher-level of interest and funding becomes more available.”

Unfortunately, the celebrity-like status comes and goes, leaving researchers continually searching for funding. “That galvanizes someone like me to find a way to get things done,” said Houser.

She and co-investigator Jeanne Loring, Ph.D., head of the Center for Regenerative Medicine at the Scripps Clinic, are now the beneficiaries of Summit 4 Stem Cell, an organization established to support non-embryonic stem cell research. In September, the organization arranged a climb to the summit of Mount Kilimanjaro, raising the funds needed for Houser and the team to begin phase one of their study that promises to delay the effects of Parkinson’s for about 10 years.

The duo will harvest skin cells from Parkinson’s patients and develop them into dopamine-producing neurons. Later, those neurons will then be injected into the donor’s own brain to replace those no longer firing.

Houser credits her work in Parkinson’s as a continuation of an interest stimulated by her mentors – beginning back in medical school.

“I’m fortunate to now have an opportunity to advance the field in my own tiny way.”

## Tweet, google and blog to become a better MD

BY DANIELLE JONES



*Danielle Jones is a third-year medical student in the School of Medicine at Lubbock. She is the author of *Mind On Medicine* (<http://MindOnMed.com>) and tweets as @daniellenjones. Her presence in social media has provided her with the opportunity to be published on the well-known website KevinMD.com, as well as earned her the chance to be a founding medical student of HealthTap University and student ambassador of Doximity, a medical app created by the master-mind behind Epocrates, the leading maker of mobile health software for health care providers.*

**W**e bank online, book vacations online, buy everything from clothes to cars online and, in some places, even grocery shop online. The world is going wireless and many people now expect access to not only their friends and family when they boot up, but also to their health information and providers.

Changes to AAP car seat recommendations, the Makena controversy, E. coli outbreaks, and crib bumper safety are all medical topics with life-changing implications I learned of online well before they were hot topics in the hospital.

When colleagues discover my participation in social media, a growing realm of the Web that has come to include things like tweeting and blogging, the most common response is a warning to be careful what I say. This cautionary advice is with good intention, but emphasizes the reality that those of us in medicine tend to lag behind in today's advancing digital age.

As the future of medicine changes, we have a responsibility to be conscious of the fact that "Dr. Google" sees patients long before we do.

While this isn't always ideal, it's real and it's not going away. Questions about seat belts, cigarettes and contraception must expand to

include asking patients where they find health information online and continually educating them on reliable resources.

How can we possibly advocate for our patients if we shy away from the very venues they are utilizing to investigate symptoms?

Your patients aren't just Googling their symptoms, either. They're Googling you. If you don't create an online presence, someone — a company, a former employer or the guy up the street — is going to create one for you. When I started dipping my toe into the world colloquially known as "health care social media" (or #hscm on Twitter), I wasn't sure what to expect. What I found was a group of doctors and students paving the way to enhanced patient care, education and business with an appropriate online presence.

Being active on Twitter and blogging is not only teaching me to be a better (future) physician, it's keeping me up-to-date on research, helping me network, and creating an online footprint with more credibility and consistency than the guy up the street will have while ranting about me online because my overgrown lawn irritates him.

We've all heard horror stories — confidentiality breeches, unprofessional behavior, irresponsibility. However, the world of social media is so much more and, when utilized appropriately, is a huge advantage to health care, both by complimenting physician-patient relationships and by improving education.

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Rx

SEVENTEEN-YEAR-OLD DAHLTON WAGNER FOUND A NICE LITTLE FIXER-UPPER FOR HIS EAGLE SCOUT PROJECT.

TODAY, THE TTUHSC PEDIATRIC ONCOLOGY CLINIC WAITING ROOM HAS MANY COMFORTS OF HOME, MAKING THE APPOINTMENT EXPERIENCE A LITTLE MORE TOLERABLE FOR PATIENTS AND THEIR FAMILIES THANKS TO THIS ONE YOUNG MAN'S EFFORTS TO MAKE A DIFFERENCE IN HIS COMMUNITY.

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[AND LEARN HOW YOUR GIFT CAN IMPACT TTUHSC]

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