

# 2014



## President's Report to Board of Regents



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TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER



Tedd L. Mitchell, M.D.

Texas Tech University  
Health Sciences Center

December 11 - 12, 2014

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# **TTUHSC News**

## **President's Annual State of the University Address and Faculty Awards Convocation**

TTUHSC President Tedd L. Mitchell, M.D., hosted the annual State of the University Address Nov. 20. Faculty and staff members joined to learn what to expect in the coming year and to recognize presidential award recipients for their achievements in the following categories:

### **Excellence In Teaching**

**Gordon Woods**, M.D., MPE, FACP – Paul L. Foster School of Medicine, El Paso

**Vardan Karamyan**, Pharm.D., Ph.D. – School of Pharmacy, Amarillo

### **Excellence in Research**

**Luis Cuello**, Ph.D. – Graduate School of Biomedical Sciences, Lubbock

### **Young Investigator**

**Michaela Jansen**, Pharm.D., Ph.D. – School of Pharmacy, Lubbock

**Eribeth Penaranda**, M.D. – Paul L. Foster School of Medicine, El Paso

### **Outstanding Clinician**

**Brian Irons**, Pharm.D., FCCP, BCACP, BCPS, BC-ADM – School of Pharmacy, Lubbock

**William Hale**, M.D. – School of Medicine, Amarillo

### **Excellence in Community Engagement**

**Jeanie Jaramillo**, Pharm.D. – School of Pharmacy, Amarillo

### **Outstanding Professor**

**Thomas Tenner**, Ph.D. – School of Medicine, Lubbock

### **Award For Interprofessional Teamwork**

**Ruth Bargainer**, MSN, R.N., CNE – School of Nursing, Abilene

**Tina Butler**, MPAS, PA-C – School of Allied Health Sciences, Midland

**Ann Hagstrom**, MSN, R.N. – School of Nursing, Lubbock

**Lori Hammond**, R.N., MSN – School of Nursing, Odessa

**Gilbert Handal**, M.D. – Paul L. Foster School of Medicine, El Paso

**Pat Francis Johnson**, R.N., DNP – School of Nursing, Lubbock

**Mary Klein**, Pharm.D., BCACP – School of Pharmacy, Abilene

**Harold Miller**, Ph.D. – School of Pharmacy, Abilene

**Kenna Payne**, Pharm.D., BCPS – School of Pharmacy, Amarillo

**Carolyn Perry**, MS – School of Allied Health Sciences, Lubbock

**Lisa Popp**, Ph.D. – School of Medicine, Lubbock

**Debra Winckler**, MSN, R.N. – School of Nursing, Abilene

**Yan Zhang**, Ph.D. – School of Medicine, Lubbock

# TTUHSC Strategic Planning Meeting Set for January 8, 2015



## TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER™

### **Mission**

The mission of the Texas Tech University Health Sciences Center is to improve the health of people by providing high quality educational opportunities to students and health care professionals, advancing knowledge through scholarship and research, and providing patient care and service.

### **Vision**

Texas Tech University Health Sciences Center will become a nationally recognized health sciences university.

- **Priority 1 – Increase Enrollment and Promote Student Success**
  - Expand and build new facilities to address space needs
  - Grow student scholarships
  - Work to provide students with enhanced learning experiences through programmatic and technological systems; i.e. cutting-edge IT infrastructure
- **Priority 2 – Strengthen Academic Quality and Reputation**
  - Support development of proposed School of Public Health
  - Support high quality faculty and programs through efforts in external recognition; i.e. Nation Academy memberships, etc.
  - Continue collaborative efforts with TTU and other partners on multiple areas of mutual interest in education, research and service
  - Continue efforts to expand telemedicine capacity in support of state and local priorities and needs
  - Continue TTUHSC's leading efforts in expanding interprofessional education as a cultural priority in healthcare education.
  - Continue efforts to be a leader in primary care by support of FMAT
- **Priority 3 – Expand and Enhance Research and Creative Scholarship**
  - Support the efforts of SVP for Research as well as new basic science faculty chairs
  - Facilitate faculty/student participation in research with infrastructure
  - Support TTUHSC Institutes with baseline budgeting
  - Enhance TTUHSC's research efforts by analyzing and improving current protocols, procedures and infrastructure

- **Priority 4 – Further Outreach and Engagement**
  - Continue support of student-led free clinic efforts with baseline budgeting
  - Continue support of Global Health Department with baseline budgeting
  - Continue efforts to bring VA clinic to TTUHSC campus
  - Continue support of Combest Center both for education and service
  - Continue outreach to donors, patients, and alumni of TTUHSC (Your Life; Our Purpose initiative)
  
- **Priority 5 – Increase and Maximize Resources**
  - Continue efforts to keep administrative overhead low even with the loss of support from TTUHSC at El Paso
  - Continue efforts to improve income from practice plans, partnerships and other non-governmental resources

## **LDDC seeks input from TTUHSC, TTU and TTUS in discussions regarding downtown development**

The Lubbock Downtown Development Corporation, comprised of local business leaders interested in revitalizing and transforming the downtown area, have been having discussions with TTUS Chancellor Duncan, TTUHSC President Tedd Mitchell and TTU President Duane Nellis to get their input on ways that the city might work with the universities as part of this effort.

## **MommyMeds™ App Reaches Number One in App Store!**

Texas Tech University Health Sciences Center (TTUHSC) announced the latest versions of the MommyMeds™ mobile app and the MommyMeds.com website and within hours the innovative new app soared to No. 1, the most-downloaded spot in the “Medical” category of the iTunes App Store. The sudden spike in popularity of the app indicates the brand is achieving its goal of educating expectant and breastfeeding moms about medication safety.

“There is almost always something a pregnant mother can use safely,” said Thomas Hale, R.Ph., Ph.D., executive director of the InfantRisk Center and author of ‘Medications and Mother’s Milk.’ “We want to promote that with a variety of useful tools and information.”

The app and website are backed by the evidenced-based research and information found in Hale’s book. The InfantRisk Center, which opened in 2010 through funding provided by a Laura W. Bush Institute for Women’s Health seed grant, strives to educate health care providers and the general public in order to reduce birth defects and create healthy breastfeeding relationships. The center’s staff has responded to more than 35,000 calls since opening.

The app brings the research and information to the mom 24/7 and features:

- Reliable safety ratings and other information for more than 20,000 drugs, vitamins and herbals
- Product name or category search for safety information to determine if the medication is safe for use during each trimester and while breastfeeding
- Convenient barcode scanner for over-the-counter medications
- List of appropriate drugs for various conditions, including headache, nausea and allergies, to find symptom solutions while pregnant or breastfeeding
- Hot topics related to pregnancy and breastfeeding

These features create an innovative, interactive resource that was a finalist for the 2013 Fierce Innovation Awards: Healthcare Edition in the category of Health Information Exchange.

## **Annual Symposium Brings Awareness to Women’s Health**

The Laura W. Bush institute for Women’s Health, the Office of the President, and the Office of the Executive Vice President, Provost and School of Medicine welcomed guest lecturers, award honorees and pioneers in the fields of gender-specific medicine and women’s health to its Lubbock campus for the 3rd Annual Gender-Specific Medicine and Women’s Health Symposium, Oct. 24.

TTUHSC President Tedd L. Mitchell, M.D., opened the event with a message emphasizing the importance of gender-specific research in medicine. Mitchell explained how recognizing

physiological differences between men and women can lead to more efficient and logical research.

In his presentation, “Sexual Differentiation of the Brain; a Whole-Body Perspective,” keynote speaker Geert de Vries, Ph.D, professor of neuroscience in the Neuroscience Institute at Georgia State University discussed sex and gender differences and their relationship to the brain. The second keynote speaker, Gillian Einstein, Ph.D., psychology professor at Dalla Lana School of Public Health in Toronto presented, “When Does A Difference Make A Difference?,” which focused on the observable differences between men and women, their hormonal origin and their significance in medicine.

The event concluded with a research awards ceremony hosted by Mitchell. Lauren Swartz was recognized with the award for clinical and translational research for her project, “Gender Differences in Mental Health Screening and Depression Among Adolescents with Recurrent Diabetes Ketoacidosis”. Andrew Armstrong was awarded in the basic research category for his project, “Gender Disparity in the Inflammatory Response Following Burn Injury.” Submitted research projects were assessed according to their innovation in women’s health or gender-specific medicine.

Susan Bergeson, Ph.D. and associate professor in the TTUHSC Department of Pharmacology and Neuroscience also was given a special recognition and gift for her dedication to women’s health and gender-specific medical research by Marjorie Jenkins, M.D., FACP, professor and associate dean for women in science for the TTUHSC School of Medicine, regional director and chief scientific officer for the Laura W. Bush Institute for Women’s Health Amarillo Campus as well as co-chair and speaker for this year’s symposium.

# School of Allied Health Sciences News

## **SOAHS ranked for online program**

*Amarillo Globe-News (11/27/14)*

Edudemic, an education and technology website, has ranked Texas Tech University Health Sciences Center the 24th online college in Texas.

“We work very hard to ensure that the quality of education in our online programs is the same as a traditional face-to-face program,” School of Allied Health Sciences Dean Robin Satterwhite said. “As a result, they continue to grow in popularity and related enrollment.”

Edudemic based its rankings on tuition, academic support, retention, graduation rates and program diversity.

The health sciences center offers nine online programs that include bachelor’s, second-degree programs and master’s programs.

## **School of Allied Health Sciences Hosts Interprofessional Learning Event**

### **Students use teamwork to create treatment plan for vestibular disorders.**

An interprofessional-learning event hosted by the School of Allied Health Sciences brought in attendance from both the School of Allied Health Sciences and the School of Medicine. The event called “Management of Vestibular and Balance Disorders” worked to both educate attendees about vestibular issues, as well as demonstrate the effectiveness of an interprofessional network of health care providers working together to solve patients’ problems.

The event consisted of two parts. The first component was a background lecture over vestibular issues presented by Steven Zupancic, Au.D., Ph.D., Associate Professor, and Amanda Rodriguez, Au.D., an audiologist and Ph.D. student in the Communication Sciences and Disorders program. The vestibular system is comprised of parts of the inner ear and brain that are responsible for controlling balance and coordinating eye movement. Various diseases, environmental factors or injuries can cause vestibular disorders.

After hearing the lecture, students were broken into groups, including teammates from each professional program. The groups worked together to review example cases to reach a diagnosis and create an interprofessional treatment plan. Students received guidance from



facilitators from the School of Allied Health Sciences, the School of Medicine, the School of Pharmacy, the School of Nursing and the Graduate School of Biomedical Sciences to work through the cases.

Students who attended gained valuable insight about working in an interprofessional team to help patients and were able to see first-hand how interprofessional teamwork can effectively solve problems.

### *A Great Example of Interprofessional Education at TTUHSC:*

**From:** Zupancic, Steven  
**Sent:** Tuesday, November 11, 2014 10:50 AM  
**To:** Satterwhite, Robin  
**Cc:** Hicks, Candace; Koul, Rajinder  
**Subject:** TTUHSC Vestibular Learning Event

Dr. Satterwhite-

Yesterday afternoon an Interprofessional Educational Learning Event titled “Management of Vestibular and Balance Disorders” was held here at the TTUHSC. Student attendance at this event was much higher than anticipated. The final numbers from the schools were 139 from SOM, 75 SOAHS (Lubbock, Odessa and Amarillo PT, and Lubbock audiology). From what I have been told this is the largest event of this type ever held at TTUHSC and the informal student feedback was very positive.

The event had two different components. This first was a background lecture over vestibular issues given by myself and Amanda Rodriguez (Ph.D. student in CSD). After the lecture the students were broken up into groups that included students from each of the professional programs. These groups were tasked to work together in reviewing cases to provide differential diagnosis and treatment plans. During the individual groups, we had facilitators from SOAHS, SOM, SOP, SON, GSBS to help guide the students as they worked through the cases.

If you have any questions regarding this event, please let me know.

Thank you,  
SZ

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**Steven Zupancic, Au.D., Ph.D., CCC/A, FAAA**

Associate Professor - SOAHS Department of Speech, Language and Hearing Sciences

Adjunct Associate Professor - SOM Department of Surgery

Adjunct Graduate Faculty - TTU Educational Psychology & Leadership

Faculty Advisor – TTUHSC Chapter of the Student Academy of Audiology

## TOTA Awards Five with Interdisciplinary Award

### School of Allied Health Sciences Faculty Receive Award for Interdisciplinary Teamwork

Five TTUHSC School of Allied Health Sciences faculty members were recognized at the Texas Occupational Therapy Association's (TOTA) annual conference in Sugar Land, Texas in November for their success in projects related to allied health interdisciplinary therapy.

Dawndra Sechrist, Ph.D., OTR, assistant professor and program director of occupational therapy, Cynthia Tiongco, MOT, OTR, assistant professor of occupational therapy, Carolyn Perry, M.S., CCC-SLPI, assistant professor of speech and hearing sciences, Heather Carr, M.S., instructor of speech-language pathology, and Brittany Hall, M.S., CCC-SLPI, instructor of speech and hearing sciences, comprised the group that was assessed according to the following team characteristics:

- Team participation in community projects that deeply enrich the lives of persons served
- Team participation in patient-advocacy activities
- Team involvement in legislative activities to improve the quality of life of persons served by the profession
- Team participation in joint research efforts
- Team participation in non-traditional program

The nomination included a written statement to TOTA to describe how the team had demonstrated success in some or all of the assessment criteria.

TTUHSC School of Allied Health Sciences strives to develop interdisciplinary teamwork within its 19 distinct degree programs. The recognition of TTUHSC School of Allied Health Sciences faculty at the TOTA conference indicates growing success in that goal.

“Our faculty have worked very hard to develop a culture and practice of interdisciplinary education,” said Robin Satterwhite, Ed.D., FACHE, dean of the School of Allied Health Sciences. “This is an excellent example of the successes of interdisciplinary education within our school.”

The team was nominated for its work in two allied health programs, Ready Raiders and Tech Tykes. These programs are both summer development courses for 3 to 6-year old children. Camps like Ready Raiders and Tech Tykes create opportunities for occupational therapists and speech therapists to work together to create a measurable impact in the community.

## November Community Medical School Featured Athletic Training Professor

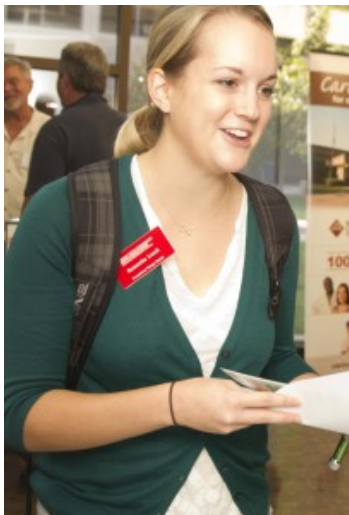
Community members, Texas Tech University students, as well as Texas Tech University Health Sciences Center (TTUHSC) faculty, staff and students ventured out into the cold winter weather for a presentation titled, “Backbones and Brains: How Athletic Training Tunes the Body and Mind for Victory” by Toby Brooks, Ph.D., associate professor of athletic training at TTUHSC School of Allied Health Sciences.

Brooks’ presentation explained the significance, history and potential of athletic training in school athletics, recreational competition and college and professional sports. Recent advancements have made athletic training a preventive superpower for managing sports injuries and Brooks took the audience through the entire scope of the sports medicine team, as well as the education offered in the Master of Athletic Training program at TTUHSC.

The event opened with a brief presentation over the current Enterovirus outbreak in the U.S., including the presence of the virus in Lubbock by Richard Lampe, M.D., professor and chairman of the Department of Pediatrics and expert in infectious disease. Brooks ended the course with questions from the audience regarding athletic training and notable sports injuries.

## Making Connections: Students and Employers Mingle at Annual Job Fair

### Hands on curriculums prepare SOAHS students for attractive career opportunities



Second year occupational therapy student Samantha Leach speaks with potential employers

Within minutes of opening, the TTUHSC School of Allied Health Sciences job fair was bustling with excited allied health students, faculty and administrators, as well as prominent health care employers from across the state. For many graduating allied health students, the event was a coveted opportunity to meet face-to-face with potential employers in allied health care fields such as physical therapy, occupational therapy, speech therapy, clinical laboratory science and audiology.

More than 30 vendors turned out to pitch career paths to newly minted allied health professionals. The impressive vendor turnout is indicative of the climate in allied health care, a field in which there are reportedly more jobs

than there are qualified health care providers. Allied health is a rapidly growing group of fields with more than 5 million working professionals and more than 200 distinct careers in the U.S.

TTUHSC School of Allied Health Sciences has led the way in creating qualified allied health care providers since graduating its first class of 18 students in 1983. Since then, the school's accomplishments have included creating the first Doctor of Audiology program located west of the Mississippi and the first Master of Science in Molecular Pathology program in the nation. The school graduated more than 400 students from its nineteen programs in 2014. Health care institutions like TrustPoint Hospital, a 71-bed, premier rehabilitation facility in Lubbock, recognize the talent stemming from the school and attend the annual job fair to find new employees.

"We've actually been coming to this job fair since our hospital opened in 2008, so I guess this would be our sixth consecutive year coming," said Seth Torres with TrustPoint Hospital. "We've had a lot of success hiring PT, OT and speech (TTUHSC) graduates into our hospital. I think if you actually look at our occupational therapy department, over 80 percent of our occupational therapists have come out of the Texas Tech program. So, we've had a phenomenal amount of success and some of those contacts came out of this job fair."

The high demand for graduates in her field is great news for Samantha Leach, a second-year occupational therapy student.



Senior clinical laboratory sciences student Aaron Solis from Amarillo engaging with prospective employers

"It's a huge benefit to get your name in and get an email to even contact up to a year after we graduate," Leach said. While Leach wants to move back to her home state of Colorado, the job fair still helped her make connections with some institutions that have branches near her hometown.

"There are some places that expand outward and I made connections with those companies," Leach said.

Wherever she goes, Leach will certainly find plenty to do in the growing, diverse field of occupational therapy.

"In occupational (therapy), there is huge variety from NICU with babies all the way to working with geriatrics and I think that's really fun," Leach said.

Many students said they were drawn to the school because they sought a varied and "hands-on" curriculum that allowed them to work with seasoned allied health professionals extensively before graduation. Health care institutions like TrustPoint pursue opportunities to educate and possibly recruit allied health students.

“We intentionally try to be a part of the curriculum,” said Torres. “We have many clinicians who help (the students) do their fieldwork to establish us as a fieldwork site. We also do a lot of guest lectures.”

Students in other allied health fields made valuable connections, as well.

“One of the vendors here is where I’m going to be doing my preceptorship,” said Aaron Solis, a senior clinical laboratory sciences student from Amarillo. “I also found another in Fort Worth, which is where I plan to move after I get some experience under my belt.”

Solis’ time in the clinical laboratory sciences program at the TTUHSC School of Allied Health Sciences has helped him understand exactly what kind of career experience he wants.

“At first, I wanted to be a medical student, but then I found out about clinical laboratory science,” Solis explained. “I thought it was interesting that I could work in the lab and actually run the tests to diagnose patients.”

Solis said the best part about a career in clinical laboratory science is the flexibility and pride on the job.

“I’ll have time to spend with my family and help my community,” Solis said.

# School of Medicine News

## The Free Clinic

### Continuing to Make an Impact



Every Wednesday night, patients begin to form a line in the hallways of Lubbock Impact hoping to receive medical care. As of this year more than 3,000 unique patients have received medical attention at the student-run free clinic that is completely staffed, operated and led by medical students. This year's leadership team has made some changes, including a name change to The Free Clinic.

Patrick Marquardt, second-year medical student and leader of The Free Clinic, said the hope is to make it easier for community members.

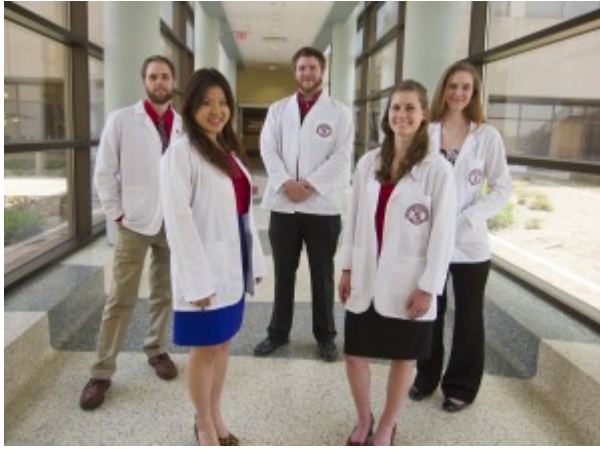
“An official name had never been cemented and coming into leadership this year, it was one of our goals to keep the name consistent, for people to know where they are going,” Marquardt said. “It’s important to have an official name moving forward. We are the same clinic, but we hope this will make it easier for patients to identify. This is the name of the future.”

With the new name, comes a new logo and look for The Free Clinic that the leadership team hopes will help those in the community associate with the health care that they provide.

Since taking over the clinic in April, the medical student leadership team, which consists of Patrick Marquardt, Matt Driver, Stacey Lynch, Kandis Wright and Peihuan Tsai, has been hard at work to continue the tradition of past teams as well as implementing new things to better provide health care at the clinic. Marquardt said the different personalities and talents of the team benefit the clinic.

This August, The Free Clinic received a \$25,000 grant from the national Chartis Foundation. Marquardt said the grant will help provide vaccinations at the clinic.

“This was the first grant we had done as a leadership team,” Marquardt said. “We are excited to now provide Influenza vaccinations as well as Gardasil and T-dap. We are planning to expand this program and offer others, such as Zostavax for shingles and Pneumovax for meningitis and pneumonia. Vaccinations are expensive, but if people can get them we can prevent many diseases.”



The Free Clinic this year also has a new tool with the use of ultrasound technology. The Texas Tech University Health Sciences Center simulation center loans ultrasound equipment every week and Marquardt says now they can be more high tech and see things we could not have before.

“To our knowledge, we are the only student-run free clinic in the nation which has access to ultrasound,” Marquardt said. “This is for educational opportunities not for diagnostic

purposes. Three of the five leadership members are currently taking an ultrasound elective class and there is a physician in charge who guides us and teaches us. We encourage our students to use it because ultrasound is being implemented across the country in all specialties of medicine.”

Patients of The Free Clinic continue to take part in specialty clinics like the Women’s Health Day Clinic held in October.

“More than 25 women came out and we received a lot of great feedback from both students and patients,” Marquardt said. “Women I talked to on the phone had never had a pap smear and many did not know what exams they even needed to get. This health care is not accessible to them. So it’s a success for The Free Clinic to be able to provide this for our community.”

Although the leadership team helps coordinate students, which now includes nursing and pharmacy students, for the clinic, Fiona Prabhu, M.D., and Kelly Bennett, M.D., organize and recruit the physicians who see patients. Marquardt said the teamwork with students, physicians and Lubbock Impact provides much needed health care for the area’s uninsured.

“We are excited to make the clinic something that will last into the future and help the students that come after us,” Marquardt said. “The Free Clinic is all about the patient experience. We are helping a lot of people and feel that we are truly making a difference in this community. This clinic has also shown us how to run a medical practice and has been an invaluable experience to us as students. We are honored to be a part of The Free Clinic.”

## The Gift that Keeps on Giving

### Department of Internal Medicine Named for J.T. and Margaret Talkington

Margaret Talkington loved Lubbock. She and her husband, J.T. Talkington, moved from Fort Worth to Lubbock in 1946. Since then, they both were fiercely loyal to their community and its citizens.

Both were successful in business and knew they wanted their means distributed throughout the community; therefore, the J.T. and Margaret Talkington Charitable Foundation Inc. was founded. On Oct. 21, 2014, the Texas Tech University Health Sciences Center announced the J.T. and Margaret Talkington Department of Internal Medicine, the first department to be named at TTUHSC.

The Talkington Foundation, comprised of the couple's cherished friends, had no trouble honoring the grant request to name the Department of Internal Medicine especially since Cynthia Jumper, M.D., M.P.H., professor and chair of the Department of Internal Medicine, was Margaret's personal physician in her final years.

"Margaret loved Dr. Jumper, and she was so wonderful to Margaret," Park said. "They had a wonderful friendship in Margaret's last years, and she was a great physician."

The Talkington Foundation gift also supports six endowed chairs for the Department of Internal Medicine: two in gastroenterology, two in rheumatology, and one each in endocrinology and infectious disease.

"We have several specialties that need to be filled in the Department of Internal Medicine," said Jumper. "These specialties are challenging to fill because they are not procedure based, which is how physicians are primarily reimbursed. However, these specialties are important because they are the ones whom physicians refer to for a problem they can't diagnose. They are the forerunners of diagnosis and treatment."

In Lubbock, there are only five rheumatologists and three infectious disease physicians, Jumper said.

"It's important that we train more physicians in these specialties that will stay in the Lubbock area and give our patients easier access to this specialty health care," she said. "Margaret had a deep sense of loyalty to her community, and I always admired that about her. I want to be able to serve the community by providing more specialty physicians to our patients to meet their health care needs."

At the press conference to name the Department of Internal Medicine, Alan Henry, former Lubbock Mayor and board member of the Talkington Foundation, said that J.T. and Margaret would have looked favorably on this gift.



“We are really excited about the prospects of this gift and the future it procures for Lubbock,” he said. “There aren’t many cities that have one world class institution, and we have two (Texas Tech and TTUHSC). We hope this gift sets a pattern of giving and supporting the Texas Tech Health Sciences Center, a world class institution with world class instruction.”

TTUHSC President Tedd L. Mitchell, M.D., said the gift was important because internal medicine is the bedrock of any health science center.

“The physicians in the Department of Internal Medicine are the ‘Sherlock Holmes’ of medicine,” he said. “They are the ones referred to when no one else can figure out what’s going on. Having these specialties in our department makes our academic health center a referral magnet for this area. These aren’t fields that generate a lot of income, but they are extremely important because not only do they provide better health care for patients but also offer something to physicians in the community, so we are extremely grateful for this gift.”

## **Pediatric Club Hosts Fall Health & Obesity Awareness Fair**

The TTUHSC School of Medicine Pediatric Club hosted a Fall Health & Obesity Awareness Fair Saturday, Nov. 8 at the Science Spectrum in Lubbock.

Kyler Black, second-year medical student and Pediatric Club president, said this year’s health fair focused on the growing epidemic of obesity.

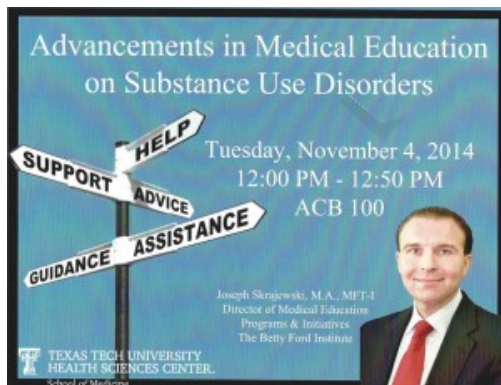
“We wanted to host an activity that would meet a community need, yet, be fun for the kids who attended,” Black said.

In 2011, the Lubbock Board of Health reported that 38.7 percent of adults living in Lubbock were overweight and 77.6 percent of adults did not eat the daily recommended serving of 5 fruits or vegetables.

“We believe that the best place to treat this growing epidemic is not in the clinic, but in the home,” Black said. “If we can instill in children better eating and exercise habits from a young age, we help children live healthier, happy lives and in turn, help reduce the number of obesity-related diseases affecting our community and nation.”

Parents and children were able to learn fun ways to exercise with items they have at home, how to make tasty, healthy snacks and various activities they can get involved in within the community.

## Betty Ford Institute director visits, speaks on substance use disorders



Joseph Skrajewski, M.A., MFT-I, Director of Medical Education of Programs and Initiatives at the Betty Ford Institute in Rancho Mirage, California, visited the Texas Tech University Health Sciences Center on Tuesday, November 4, 2014 to present “Advancements in Medical Education on Substance Use Disorders”.

Skrajewski heads the Betty Ford Summer Institute program, which gives third- and fourth-year medical students a first-hand look at what happens to those suffering from addiction, the struggles addiction brings and how the disease is treated. Prior to assuming his role as Director of Medical Education Programs and Initiatives, he worked as a Chemical Dependency Counselor at the Betty Ford Center, conducting psychosocial assessments, facilitating primary groups, specialty groups and workshops. Skrajewski has presented and lectured all over the world on numerous topics related to addiction.

Once a year, TTUHSC medical students and faculty can apply to attend the Betty Ford Summer Institute program as part of the Addiction Medical Curriculum. **Only two schools across the country offer this program as an elective — TTUHSC and the Texas College of Osteopathic Medicine at the University of North Texas Health Science Center.** Skrajewski also spoke at the University of North Texas in Denton following his lecture at TTUHSC.

## Gov. Perry Appoints Varma to Texas Medical Board



Dr. Varma was awarded the 2014 Texas Medical Association Platinum Award for Excellence in Academic Medicine this May.

Gov. Rick Perry has appointed Surendra Varma, M.D., to the Texas Medical Board. The board protects and enhances the public's health, safety and welfare by establishing and maintaining standards of excellence used in regulating the practice of medicine and ensuring quality health care for Texans.

Varma is the associate dean of Graduate Medical Education and Resident Affairs at TTUHSC. He also is the Ted Hartman Endowed Chair in Medical Education and vice-chairman of Pediatrics at the TTUHSC School of Medicine.

"As a leader in health care education as well as the field of pediatrics, Dr. Varma's appointment to the Texas Medical Board is well deserved," said Steven L. Berk, M.D., TTUHSC executive vice president, provost and dean of the School of Medicine. "His commitment to those afflicted with endocrine metabolic diseases has changed the lives of countless people across our state. We are proud that our School of Medicine is represented in leadership roles across the state."

Varma is certified by the American Board of Pediatrics in pediatrics and pediatric endocrinology. He is a member of the American and Texas Pediatric societies, American and Texas Medical associations, Pediatric Endocrine Society, American Academy of Pediatrics, Society for Pediatric Research, The Endocrine Society, American Diabetes Association, Academic Pediatric Association and the Texas Medical Board District Three Review Committee. He also is a member of the Texas Medical Foundation Health Quality Institute Board of Trustees, past president of the Texas Pediatric Society and the Lubbock, Crosby and Garza County Medical societies, and a past member of the U.S. Health and Human Services Advisory Committee on Training in Primary Care Medicine and Dentistry. He served in the U.S. Army Reserve.

Varma received a medical degree from King George's Medical University and completed his pediatrics and pediatric endocrinology fellowships at Harvard Medical School.

# Graduate School of Biomedical Sciences News

## Student Spotlight: The Path Less Travelled

### SGA President talks cycling, experience at TTUHSC

When Eric Edwards was making a move from Minnesota to Texas, he knew his old 1998 Grand Am would not make the 1,500 mile trip. He sold the car and once he arrived in Lubbock purchased a bike to get around town.

“Since I didn’t have a car, I did everything on my bike,” Edwards said. “I would go to the grocery store, leave with two days’ worth of groceries in my backpack and just really started to enjoy cycling everywhere. And then I met a guy out at the Clovis Air Force Base who does triathlons and he started pushing me to get into the competitive side of cycling. It just snowballed from there, and now it is my favorite hobby out here.”

Edwards, has been cycling competitively for about a year. He now races with the Texas Tech Cycling team and competes in USA cycling sanctioned races at state and national levels. He cycles three times a week, 50 to 100 miles on Saturdays and each Tuesday and Thursday about 30 to 50 miles.

This year Edwards has suffered a few injuries. After a bicycle wreck, he broke his ribs and earlier in the year tore his ACL snowboarding. Before coming to TTUHSC, he was a snowboarding instructor. But he said, even with the injuries, cycling is what he enjoys.



“Riding out in the Ransom Canyon or Buffalo Springs Lake area or sometimes out past Post and Slaton, gives me that endorphin rush,” Edwards said. “I feel great after cycling and it helps relieve a lot of stress.”

Edwards has reason to stress. He is a Graduate School of Biomedical Sciences student who is working on his MBA, and also serves as the TTUHSC Student Government Association president.

“I have really developed time management skills,” Edwards said. “I have to really budget my time really well. I may be working on weekends doing research, studying, doing homework assignments and then find it really rewarding when I finish all these tasks.”

Edwards races with the TTU Cycling Team.

Edwards was born and raised in White Bear Lake, Minnesota, which is a suburb of St. Paul, Minneapolis. In 2011, he graduated from the University of Minnesota in Duluth. One of his co-

workers collaborated with Dr. Bryan Sutton, Ph.D., from the TTUHSC Department of Physiology and encouraged him become a graduate student.

“I looked into the program here at TTUHSC and once accepted, moved down here and never looked back,” Edwards said. “I’ve always been fascinated with biology, and chemistry was always interesting to me. But when I started biochemistry my junior year in college I just loved it and I decided to pursue it.”

As a Graduate School of Biomedical Sciences, Edwards is working toward his Ph.D. in biochemistry and his MBA through STEM, which is specifically for students in the science field who want to get into the industry field. Edwards hopes to work for the pharmaceutical or biotech industry but on the administrative side, possibly with biotech consulting or management for these companies.

For the past three years, he has been working with Dr. Clint MacDonald’s lab working with RNA processing.

“Everyone knows about DNA,” Edwards said. “It’s important because if there are problems with DNA, it can lead to diseases like cancer. The human body needs to process the information stored in the DNA and in the process turns it into RNA. If the processing gets out of control or happens at the wrong time, then you can get health issues for example like increased tumorigenesis of cancer or male infertility. It’s very complicated. The lab is trying to figure out how these processes work and how the regulation of it happens. We are looking at one protein and how it turns off and on and how it influences the RNA processing.”

Edwards is proud of the Graduate School of Biomedical Sciences and said he encourages students to look into research.



“You always heard about becoming a doctor and the good things they are doing. But with research, the science has come so far,” Edwards said. “The new treatments for diseases that are coming out are beyond what we could have imagined even a decade ago. Research is an exciting field to be in if you want to push the envelope with human knowledge and to help people at the same time.”

Although he enjoys his field, Edwards said when he began at TTUHSC; one of the most difficult things was meeting students from other schools. He decided to become a student senator for the TTUHSC SGA.

2014-2015 TTUHSC SGA Officers from left to right: Rebecca Marquez, Eric Edwards, Mike Russell, Sareh Cavazos

“This is actually my third year in SGA,” Edwards said. “I really liked the opportunity to interact with other students and to go out in the community with them and show off what the HSC has to offer. Upon completion of my term as a senator I wanted to get my hands into it further and I ran for vice president of operations. I really enjoyed being a part of the leadership team that is in charge of this senate of 60 plus people. Last year I decided to run for president this year. And it’s offered so many great opportunities.”

Edwards said one of the greatest experiences has been working with the other SGA officers and senators.

“It’s a great team,” Edwards said. “I could not have handpicked a better team. All are such great student leaders who are reliable and work well together. Even our senators are exceptional. They are required to complete community service hours and they have surpassed that by double. I am so proud to be a part of these leaders.”

Edwards said when he completes his degrees here at TTUHSC, he hopes to head out West, possibly in the Portland, Seattle or San Francisco area.

“Sometimes I wonder what would have happened if I had stuck to teaching snowboarding and move to Colorado,” Edwards said laughing. “But I know I’m on a better path. This is such a great community here at TTUHSC. I know I will definitely look back fondly at my time here.”

# School of Nursing News

## Patiently Purple

### TTUHSC and March of Dimes Coordinate To End Prematurity



November is National Prematurity Awareness Month and the month-long push for early and regular prenatal care and full-term pregnancy culminated in Lubbock on Friday, Nov. 14, in purple. March of Dimes encourages participants to “turn your community purple” by decorating buildings, offices and cars, and donning purple. Participants may also share photos related to the event on Twitter by using hashtag, #TXpreemies. Other “Go Purple for Premies” days will continue throughout the month in various cities across the country.

March of Dimes and the Stork’s Nest program endorsed the event. The Stork’s Nest is a collaborative program offered by the March of Dimes, the Zeta Phi Beta sorority and the **TTUHSC School of Nursing Larry Combest Community Health and Wellness Center**. The education provided through the Stork’s Nest program is coordinated with incentives to encourage expectant and new moms to engage with opportunities to learn and attend necessary prenatal visits.

“What is so heartbreaking about premature birth is that although four in ten causes for prematurity are unknown, 60 percent of pregnant women can prevent a premature birth,” said Sandra Eastling, MSN, CNM, WHNP-BC and the nurse-midwife and women’s health nurse practitioner at the Larry Combest Community Health and Wellness Center. “Education is key.”

Mothers participating in the Stork’s Nest program earn points for many proactive steps, including attending prenatal doctor visits, completing Stork’s Nest classes, connecting with available financial resources and receiving lactation training. These points then may be redeemed for baby essentials, like diapers, wipes, clothes and car seats. For health care experts like Eastling, the Stork’s Nest program is an opportunity to engage with new moms and give them encouragement and resources so that their babies can have the best possible outcome.

“Pregnancy is such a special stage in a woman’s life,” Eastling said. “I have seen the strength of women, along with their family support, overcome obstacles and celebrate in the joy of birth.”

This opportunity may not only educate mothers about the dangers associated with prematurity, but actually minimize the risk of it occurring.

“Studies have shown that a person who actively participates in their own health care has better outcomes,” said Eastling. “Educating one’s self about your body, especially during pregnancy, is an empowering act.”

According to the March of Dimes, while premature birth rates rose significantly between 1981 and 2006, prematurity has declined 11 percent in the last seven years. Like many in her field, Eastling celebrates this victory and attributes much of it to education.

“Some mothers have had the misconception that it is okay to have an induction of labor at 37 weeks, (but) sometimes a woman’s due date can be off as much as two to three weeks. This means that the baby is actually only 35 weeks old,” Eastling said. “It is a relief to know that practitioners are moving away from that train of thought. Most will not schedule an elective induction of labor before 39 weeks now.”

While prematurity is on the decline, 15 million babies are born too soon each year. Improving the quality of life for newborns and decreasing prematurity requires a widespread, coordinated effort like the one underway during November by the March of Dimes. And health care providers like Eastling have plenty of suggestions for how you can become involved.

“Recognize that premature birth is a problem that is increasing worldwide and join national efforts like ‘Go Purple for Premies,’” Eastling suggested. “If you have had a premature birth, share your story or give support to someone who has experienced a premature birth.”

With fifteen years specializing in prenatal health care and as a mom of seven, Eastling knows that expectant mothers are receptive to the current guidelines for full-term pregnancy.

“I know that expectant mothers only want to do what is best for their unborn baby,” Eastling said. “I feel that it is my calling to guide them and hold their hand throughout this journey.”



# **School of Pharmacy News**

## **One Path Leads to Another**

### **Jason Serna, a leader in the School of Pharmacy**

The central dogma of molecular biology is an explanation of the flow of genetic information within a biological system. Simply put, the central dogma states that DNA leads to RNA, which in turn leads to protein.

Ironically, Jason Serna's academic life story took a path change as he studied the central dogma. Serna was originally a computer science major who took a biology class in his undergraduate program.

Serna switched his major to biochemistry and received his Bachelor's of Science degree in chemistry from Texas A&M University – Corpus Christi in 2009. He knew he had an interest in pharmacy but was not completely certain if this was the field he wanted to pursue. In order to learn more about the field he worked at CHRISTUS Spohn Memorial Hospital as a hospital pharmacy technician.

Serna is now a fourth-year student at the Texas Tech University Health Sciences Center School of Pharmacy.

“Funny how life takes you from one thing to the next, when you thought at first you really wanted something else,” Serna said. “I have an interest in infectious diseases and currently looking at post-graduate residency programs. I'm trying to keep my options open, but one thing is for sure, I enjoy the clinical aspect of pharmacy. I enjoy problem solving and the dynamics of evidence-based medicine. Most of all, I enjoy being a part of a health care team and working together as a group providing the best possible care.”

Serna, who grew up in Corpus Christi, has become a student leader at TTUHSC and recently recognized as a 2014-2015 Hispanic Scholarship Fund Scholar. The Hispanic Scholarship Fund is the nation's leading Hispanic scholarship organization. Successful candidates are selected on the basis of academic achievement, personal strengths and leadership. Serna received a scholarship of \$5,000.

“I couldn't believe it,” Serna said. “I knew it was a hard scholarship to get, but for me it's not about succeeding or failing, but more importantly whether or not you took the chance. When I got the email it was unreal. What a great feeling.”

Charles F. Seifert, Pharm.D., FCCP, BCPS, regional dean of the School of Pharmacy, said this recognition demonstrates the quality of students at TTUHSC.

“Jason has been a very hard working president for his class and always has great and creative ideas for improving student life at TTUHSC,” Seifert said.



Serna's leadership roles include TTUHSC Student Government Association (SGA) senator, Lubbock School of Pharmacy president and campus vice president of Phi Lambda Sigma — the pharmacy leadership society. His list of committees and professional student organization involvement is extensive.

"Being involved with organizations and committees, attending meetings, setting up events, paperwork, preparing to apply to residency programs, along with rotations and assignments, it all takes a lot of time management," Serna said. "I like to keep busy and having something to do at all times. I think it prepares you to handle stress. Going through school with all the additional activities of volunteering and leadership

responsibilities prepares you for the real world and helps you adapt to the stress."

Serna hopes to secure a residency position close to home to be near his family. He is currently working on his fourth-year rotation in the critical care unit at University Medical Center. He said he chose TTUHSC because of its clinically oriented program.

"TTUHSC School of Pharmacy stands out when it comes to pharmacy schools," Serna said. "We have one the highest amount of clinical rotation hours in the nation. They start us out early in our third year. It's a lot of clinical practice experience compared to other pharmacy programs, which helps us when applying to residency programs. They prepare us to become a well-rounded pharmacist no matter what area we go into. It's great to know we are being trained by professors and preceptors who are not only experts within our field, but also well-known throughout the pharmacy community."

## **Research News**

### **TTUHSC Graduate Student Researchers receive American Heart Association grant awards**

Lea Ann Thompson (SOM - Lubbock) and Pooja Naik (SOP - Amarillo) were awarded grants from the AHA which will begin on January 1, 2015. These are highly competitive grants (only 13% of applications were awarded), designed to help students initiate careers in cardiovascular and stroke research by providing research assistance and training. These grants support research broadly related to cardiovascular function and disease and stroke, or to related clinical, basic science, bioengineering or biotechnology, and public health problems, including multidisciplinary efforts.

"These awards show that our students are highly competitive on a national basis" said Dr. Brandt Schneider, Dean of the Graduate School.

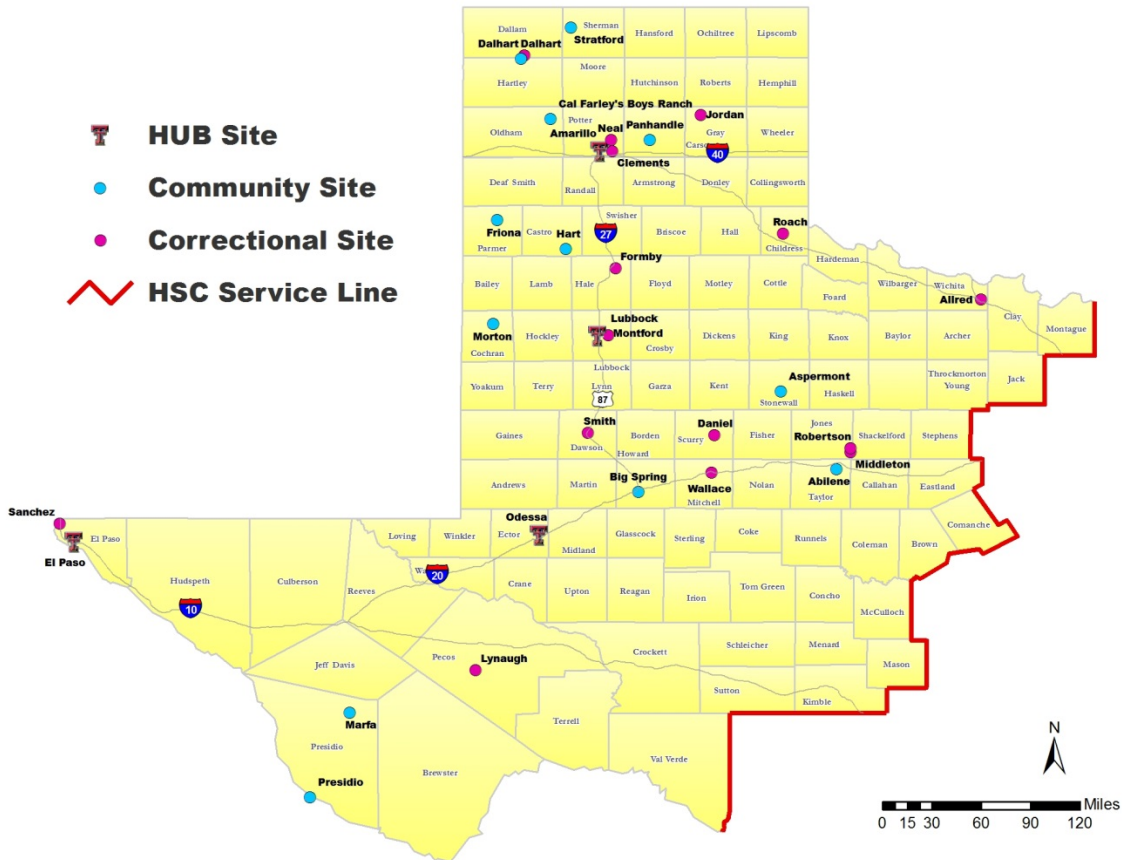
# Telemedicine News

## TTUHSC Working to improve healthcare access through telemedicine

TTUHSC's F. Marie Hall Institute for Rural Health is exploring options with regional groups to provide service opportunities for veterans as well as other underserved populations in West Texas and beyond through our telemedicine network and infrastructure.

# TELEMEDICINE

## Texas Tech Telemedicine Network



## TTUHSC News You Can Use

### Can e-cigarettes be a public health victory?

**Fourth-year TTUHSC medical student discusses the "burning" topic of e-cigarettes and their impact on public health for Lung Cancer Awareness month.**



Justin Berk, MPH, MBA, won the 2013 TMA Student of the Year award

Annoying mall vendors have been pushing what may be one of public health's greatest accomplishments—and few have taken notice. Behind pillow pet stations and the candle stand, mall shoppers can find electronic cigarettes, or “vapes.” Often targeted at smokers wanting to quit, e-cigarettes offer many of the joys of smoking without one of its major components: smoke.

Smokeless cigarettes have become a hot product, with an estimated \$1.7 billion in sales this year. According to a recent article in the Journal of the American Medical Association, over 10% of smokers have tried e-cigarettes, and almost 5% have used them in the past month. Often marketed as smoking-cessation products, a small Italian study suggested that smokers do smoke fewer real cigarettes when given e-cigarettes. A 2011 study in *Addiction* found that 77% of users used e-cigarettes for the purpose of smoking cessation and that 79% of users were afraid of relapse if they stopped using the e-cigarette. Their efficacy as a smoking cessation tool is still in question.

But for e-cigarettes to be a successful public health intervention, they do not need to help smokers quit.

E-cigarettes need not be just a smoking cessation tool. Instead, their potential comes as a smoking maintenance tool that could greatly reduce individual and public health risks. Unlike other nicotine replacement therapies such as the patch or gum, e-cigarettes deliver the full smoking experience: as users put cigarettes to their lips, see a light when they inhale, and even receive a smoke-like “throat hit.”

Studies have not yet shown that e-cigarettes are healthier than tobacco cigarettes, since longitudinal studies of this kind are years down the line. But e-cigarettes lack the major carcinogens in tobacco cigarettes, which come not from nicotine but from other toxins. Most e-cigarettes use liquid cartridges with very few ingredients: water, nicotine, flavoring, and propylene glycol. Should these cartridges be shown to have toxic effects, they are likely to be orders of magnitude less severe than those of traditional tobacco cigarettes.

E-cigarettes also offer socioeconomic benefits. They can be much cheaper than traditional cigarettes: a “5 pack” of e-cigarette cartridges costs \$10 compared to the \$36 for 5 packs of

tobacco cigarettes. As tobacco smoking is more common among disadvantaged groups with lower income and wealth, decreasing the cost of the habit could help less wealthy individuals and families.

Greater still are the societal implications of e-cigarettes. Widespread adoption of e-cigarettes—even without a decrease in nicotine intake—would create more smoke-free spaces and communities, reducing the negative health consequences of second-hand smoke. “Third-hand smoke,” a newly coined term for carcinogen deposits on clothes and furniture, which has been reported to be even more dangerous than second-hand smoke, could disappear before most people hear of it.

There are still good arguments against e-cigarettes: “secondhand vapor” of propylene glycol might still irritate others, short-term use of e-cigarettes can increase airway resistance, nicotine increases blood pressure, and e-cigarettes may introduce some non-smokers to an addictive behavior they would have otherwise avoided, especially teens.

E-cigarettes could soon become harder to acquire or more expensive, as FDA regulations this fall may ban Internet sales or otherwise restrict their sale and marketing. But even when accepting the potential individual health risks, electronic cigarettes have the potential to greatly reduce one of the world’s greatest public health risks.

E-cigarettes will be a major research topic in the years ahead. But instead of seeing them as a smoking cessation tool, we should see their potential as a safer smoking maintenance option. Reducing individual health risks and, more importantly, potentially eliminating the societal health risks of second- and third-hand smoke makes you think: those annoying mall vendors may be saving lives.

# The Great Flu Shot Debate

## Texas Tech Physicians answers your flu shot questions.

Flu season is here. According to the Centers for Disease Control and Prevention, the flu kills about 36,000 people a year in the United States. With Flu activity beginning to increase in October and peaking between December and March, Franklyn C. Babb, M.D., FAAFP, a physician for Texas Tech Physicians — Family Medicine, said don't make excuses not to get your flu vaccine.

"As a physician I have heard many reasons as to why a patient does not want the flu shot," Babb said. "The responses range from, "I never take the flu shot because one time after I did, I got the flu" and "I am afraid to take the flu shot because my sister got hers and then got sick." Neither of these responses are reasons not to get the influenza vaccine."

Babb said to consider the basics.

### **What is the flu and how do I get it?**

The flu is an upper respiratory infection caused by the influenza virus most active between October and May and most often is transmitted from person to person. It is thought that touching an object shortly after it has been touched or handled by an infected person can also transmit the infection. If you have the flu you can give it to someone else the day before you realize that you have it and can continue to do so for about one week.

### **How do I know if I have the flu?**

People who have the flu can have any of the following symptoms including fever (always) or chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue (feeling tired) and in children an upset stomach or abdominal discomfort. Your physician can test you with a nasal swab to determine if you have the flu or not.

### **How is the flu treated?**

Borrowing loosely from Benjamin Franklin, an ounce of prevention including vaccination is worth a pound of flu medication. Prevention includes avoiding those with the flu and good hand washing. Keep from spreading the flu by covering your sneeze with your sleeve and staying home when you get sick. If you become ill, see your physician immediately. Medications available to treat the flu only work if given within the first 48 hours after symptoms start. This treatment causes the infection to be shorter in duration and milder in effect. If you wait longer than that to go to your physician, all that can be done is to help you decrease the symptoms.

### **How does the flu vaccination work and should I take it?**

Flu vaccines allow the immune system to eliminate the infection caused by the influenza virus. It accomplishes this task by presenting either pieces of the virus or "broken" (attenuated) virus to the immune system allowing the production of guided missiles called antibodies. These recognize the virus by its pieces and destroy it. The vaccine must be given every year because

viruses change. Each year scientists and physicians look at the evidence and decide what goes into the vaccine for that year. The vaccine is available as an injection or as a nasal spray. It takes about two weeks for your body, through the immune system, to build these “guided missiles.” It takes a full two weeks to pass before the vaccine protects you. That is the reason why early vaccination is recommended.

**Why do some people get symptoms with the vaccine?**

The reason that some people claim to get the flu or at least complain of some of the symptoms with the vaccination is due to the immune system as well. The vaccine is designed to kick start the immune system so that it recognizes the virus and already has an arsenal of “guided missiles” to attack it. The immunization (vaccination) causes the immune system to react with its early defense system, which is what causes most of the symptoms we recognize, especially the body aches and a low-grade fever. This means that the immune system is actually doing its job and that the antibodies will be ready in two weeks time, but it is not an infection.

**Is there any reason not to get the vaccine?**

Yes, children with active asthma or wheezing should not receive the nasal spray but can receive the injection and all who have had a severe allergic reaction to a flu vaccine should not receive it again. That eliminates a very small part of the population and leaves most of us able to receive the benefits of the vaccine. In general everyone aged six months or older should receive the vaccine for his or her own protection.

“Don’t put off getting your flu vaccine. Do it today.”





All of the other reindeer used to laugh and call him names.