



TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER™

School of Pharmacy

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From the DEAN'S DESK



October - November 2010

Students pitch in to help improve community health

In November, members of the Amarillo community had several opportunities to take advantage of free health screenings offered by SOP students.

On Nov. 6, 36 first- and second-year pharmacy students participated in the 2010 Winter Outreach and Health Fair at the Guyon Sanders Resource Center, formerly known as the Tyler Street Resource Center.

The event brings together various local organizations to assist the homeless and underprivileged populations in Amarillo.

SOP students and faculty pitched in by conducting cholesterol and glucose screenings, providing blood pressure readings and disseminating information



From left: PIs Cody Cribbs, Timothy Williams and Austin De La Cruz discuss the effects of smoking at the 2010 Great American Smokeout.

regarding tobacco cessation, heartburn awareness and medication safety.

On Nov. 13, the SOP joined several local agencies at Westgate Mall to promote a smoke-free Amarillo.

The event was organized in conjunction with the The Great American Smokeout, a day when many smokers put down cigarettes and other tobacco products..

For this event, 20 SOP students handed out tobacco cessation products and pamphlets, discussed the impact smoking has on a person's body and explained the seriousness of secondhand smoke.

The presentation included posters and photos of lungs afflicted with emphysema and a jar of tar that illustrated the amount



Amarillo P2 Leah Schumpert draws blood from a patient for a glucose screening at the 2010 Winter Outreach and Health Fair.

of tar that sticks to a person's lungs after just one year of smoking a pack a day.

The SOP exhibit also starred "Smoke Man," a model of a man who is able to 'smoke' cigarettes into a clear plastic box.

When the smoke is exhaled though his mouth, cigarette debris stick to the walls of the box, demonstrating how secondhand smoke affects even non-smokers.



Amarillo PIs Elnaz Rabiei (left) and Johnson Kang discuss some causes of heartburn at the 2010 Winter Outreach and Health Fair.

The SOP contingent also set up a table where they offered free blood pressure screenings.

I want to personally thank the students and faculty who donated their time and represented the SOP at these worthwhile events.

SOP students continue WISE tradition

For the third consecutive year, the SOP helped the Amarillo Independent School District familiarize middle school girls with career opportunities in various science-related fields at the Women in Science Endeavors (WISE) Symposium.

This year, P1s Sarah Willis and Kaytlin Huseman introduced students to pharmacy practice and graduate students Naomi Wangler and Alejandra Fernandez presented the profession's scientific aspects.

Willis and Wangler worked together as a team at the 2009 WISE event, but this was the first such experience for Huseman and Fernandez.

"The WISE program seemed like a good opportunity to reach out to young women and show them how fun science can be and how we use science in our everyday lives without even thinking about it," Fernandez said.

Fernandez and Wangler showed the girls how to extract DNA from a strawberry and used lava lamps to demonstrate how liquids that do not mix separate into layers based

upon their densities. However, the most popular segment of their presentation was entitled "Burning through Money."

In that demonstration, they added a sprinkle of salt to a 50-50 solution of ethanol and water, soaked dollar bills in the solution and then set the money ablaze. They explained that the money emerges from the flames unharmed because ethanol burns faster than water due to its lower boiling point and the water insulates the money from the fire.

Willis and Huseman showed the girls how to use a mortar and



Grad students Naomi Wangler (left) and Alejandra Fernandez "burn through money" at the 2010 WISE Symposium.



P1s Kaytlin Huseman (left) and Sarah Willis help a group of WISE Symposium attendees make lip balm.

pestle and how to make lozenges and lip balm.

"I think these programs are important because they give the girls a goal in pursuing science, whether it be pharmacy or biology," Huseman said. "Not all of the girls have good role models or goals to keep them focused, and this program fills that gap. I love the career pathway I have chosen in pharmacy and I hope we were able to inspire the girls to continue to pursue their passion for science as well."

Student organization wraps spirit of Christmas in shoeboxes

Members of the Christian Pharmacists Fellowship International (CPFI), one of the SOP's student organizations, recently spent an evening packing shoeboxes full of goodies for Operation Christmas Child, an international relief project sponsored by Samaritan's Purse that seeks to make Christmas a special season for thousands of children around the world.

"Our mission, as an organization, is to use our time and talent to help people both in our community and abroad," Amarillo P2 and CPFI President Sheba Jacob said. "Operation Christmas Child was the perfect project for us this holiday season, not only to fulfill our mission, but to also provide children around the world with toys

and essentials so that they could have a blessed Christmas holiday."

The boxes were packed with small toys, school supplies, personal hygiene items, hard candies and other small items like sunglasses, hair clips, watches and flashlights.

Jacob said this was the first year CPFI participated in Operation Christmas Child and they were able to collect enough gifts and monetary donations to put together 125 gift-wrapped boxes.

"We decided to set our standards high and make our goal 200 boxes," Jacob said. "Even though we didn't meet our goal, thanks to all the Amarillo students, faculty and staff, we were able to send gifts for 125 children. For our

first year doing this project, we believe this is a great beginning."

Jacob said donors who are interested in which countries received the boxes can contact her at sheba.jacob@ttuhsc.edu.



Amarillo P1 and CPFI member Eneyine Sanni wraps a shoebox for Operation Christmas Child.

Srivastava, Raehl receive TTUHSC President's Awards

TTUHSC President Dr. Tedd L. Mitchell recognized SOP faculty members Dr. Sanjay Srivastava and Dr. Cynthia Raehl for their exceptional efforts on behalf of the University at the 2010 Faculty Awards Convocation.

Dr. Srivastava received the 2010 Excellence in Research Award for his accomplishments in research and scholarship as demonstrated in original, high-impact publications, external funding and national/international peer recognition for work done at TTUHSC.

Dr. Srivastava is an associate professor in Amarillo for the Department of Biomedical Sciences.

Dr. Raehl, chair for the Department of Pharmacy Practice in Amarillo, was the recipient of a President's Outstanding Professor Award. Honorees of this award have been recognized nationally, and usually internationally, for



Dr. Cynthia Raehl and Dr. Sanjay Srivastava joined the list of SOP honorees who have received a TTUHSC President's Award.

the importance of their scholarly achievements and have demonstrated the breadth of interest characteristically encompassed by the traditional role of professor as teacher and public servant.

Drs. Srivastava and Raehl join a long list of SOP faculty who have received a TTUHSC President's Award since 2004.

That list includes: Dr. Fakhru Ahsan (Young Investigator Award, 2004); Dr. Ulrich Bickel (Research Achievement, 2006); Dr. C.A. (CAB) Bond (University Distinguished Professor, 2006); Dr. Paul Lockman (Excellence in Teaching, 2008 and Young Investigator, 2009); Dr. Sherry Luedtke (Distinguished Clinician, 2005); Dr. Kenneth "Mac" McCall (Excellence in Teaching, 2006); Dr. Reza Mehvar (Excellence in Teaching, 2004 and Research Achievement, 2008); Dr. Majid Mordini (Young Investigator, 2008); Dr. Quentin Smith (University Distinguished Professor, 2007); Dr. James Stoll (Excellence in Teaching, 2005); Dr. Thomas Thekkumkara (Research Achievement, 2007); Dr. James Tsikouris (Young Investigator, 2004); Dr. Michael Veronin (Young Investigator, 2005); and Dr. Jon Weidanz (Excellence in Teaching, 2007).

Museum, students demonstrate at history festival

As he has every year since 1998, Texas Pharmacy Museum Curator Dr. Paul Katz took a group of SOP students to the Fannin History Festival in Amarillo.

The annual event at Fannin Middle School in Amarillo coincides with American Pharmacists Month and provides a wonderful opportunity for the SOP contingent to inform school age children, their families and the general public about present and past aspects of the pharmacy profession.

Julie Greene, Fannin Middle School librarian, organizes the festival. She estimated that more than 1,500 people attended this year's 14th annual event, including approximately 800 students.

The TPM/SOP exhibit demonstrated pill rolling using soft chocolate candy and a hand-operated pill machine. They also used a mortar and pestle to

grind candy tablets and provide a sugar coating for the pills.

Visitors watched the SOP students demonstrate the different processes and then tried their hand with the devices. The pharmacy students also fielded questions about pharmacy school and the profession in general.

"I enjoyed the fact that I could get middle school students interested in the profession of pharmacy while making edible pills the old fashioned way," Amarillo P2 Kevin Aloysius said. "While she was watching me make edible pills, one of the parents asked, 'what do you do now since pill making is replaced by machines?' She was truly amazed when I told her about the vast array of services her local pharmacist can provide such as immunizations, counseling and medication therapy management."

Aloysius worked at the pharmacy exhibit alongside classmates Detty John and Disney Rachel-Philip and Amarillo P3 Daniel Contreras. All are members of the Kappa Psi student organization.

"I seriously believe that it is through opportunities like these that we can enlighten the community regarding their most accessible and affordable healthcare professional," Aloysius said.



From left: P2s Kevin Aloysius, Disney Rachel-Philip, Detty John and P3 Daniel Contreras at the 14th Annual Fannin Middle School History Festival.

Journal cover features SOP researcher

SOP Assistant Professor Dr. Paul Lockman has received several accolades for his work in the laboratory and classroom, including a pair of TTUHSC President's Awards and a 2009 nomination for a Star Award from the Texas Higher Education Coordinating Board.

In November, Lockman was notified that his manuscript, entitled *Heterogeneous blood-tumor barrier permeability determines drug efficacy in experimental brain metastases of breast cancer*, would be featured on the Dec. 7 cover of "Clinical Cancer Research", a journal published by the American Association for Cancer Research.

"This manuscript answers a question in the field of drug delivery to brain tumors that has existed for nearly 40 years," Lockman said. "To scientifically work on a problem such as this is incredibly rewarding and it's a very big honor to have both an editorial and the cover of the journal highlight the work."

Lockman said the rate of brain metastases of breast cancer has increased significantly during the past decade, and that once these secondary tumors in the brain develop, the patient will likely pass away within two years.

"Brain metastases and brain tumors present a unique clinical problem because the blood vessels in the brain are a vascular barrier which significantly limits what drugs or molecules can enter into the brain," Lockman explained.

Lockman said the results discussed in the manuscript show a significant variability in drug concentrations in different brain metastases and that the amount of drug accumulation in brain metastases was far lower than in other tumors in different organs.

"Importantly, approximately only 10 percent of the tumors in the brain accumulated enough drug to start to kill the tumors. An alternate way to understand this is that



The Dec. 7 cover of "Clinical Cancer Research" highlights the research of SOP Assistant Professor Dr. Paul Lockman.

using standard dosing of chemotherapy, 90 percent of metastatic tumors in brain will not be killed."

Lockman and his fellow researchers are working to develop two pathways to overcome this problem. The first involves safely breaking down the brain vascular barrier to increase drug delivery to brain. The second focuses upon developing new drugs and drug delivery devices (nanoparticles) to directly get through the barrier.

The research discussed in the manuscript represents approximately four years of continual and dedicated work that includes Lockman, Dr. Quentin Smith (SOP Senior Dean for Sciences), two part-time Ph.D. researchers, six graduate students and numerous investigators from the laboratory of Dr. Patricia Steeg, who is chief of the Women's Cancers Section at the National Cancer Institute.

"On a personal level, it is very exciting to work as part of a group of scientists, clinicians and breast cancer advocates," Lockman said. "Science is evolving such that it takes multiple people with varying perspectives to answer complex questions and everyone's unique perspectives and ideas help to continually push the science to a higher level."

CVS selects TTUHSC-SOP for scholarship

CVS Caremark recently awarded \$2,500 to the scholarship fund of four of its top pharmacy school partners and the SOP is proud to be one of the recipients.

The announcement was made Nov. 30 at the National Association of Chain Drug Store's 12th Annual Foundation Dinner.

Other institutions receiving the scholarship funds included: Western University of Health Sciences College of Pharmacy; Ohio Northern University College of Pharmacy; and Long Island University College of Pharmacy and Health Sciences.

"These schools were top partners to CVS Caremark and were recommended by our team," CVS Manager for Professional and College Relations Scott Lason, R.Ph. said. "We look forward to continuing our strong partnership and support for the future pharmacists in Texas."



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In case you missed it...



Dr. MacLaughlin

- The American College of Clinical Pharmacy has reappointed Dr. Eric MacLaughlin to the Board of Pharmacy Specialty Council on Pharmacotherapy for another three-year term (2011-2013).

He is currently serving as the elected vice chair of the council and will assume chair of the council in January. The Specialty Council is responsible for the Pharmacotherapy specialty examination content,

administration, scoring and all other aspects related to sitting for this specialty certification examination. Of the five currently approved specialties, Pharmacotherapy is the largest with more than 9,000 pharmacists credentialed in 2009.



Pillai

- Venki Chithambaram Pillai, a Ph.D. candidate in the Graduate School of Biomedical Sciences in Amarillo, has received a Dean's

Scholars Award from the GSBS in Lubbock. This award recognizes outstanding graduate students with a \$5,000 increase in their stipends for the duration of their degree plan. Venki works in the lab of SOP Professor Dr. Reza Mehvar (Dept. of Pharmaceutical Sciences).

- Dr. Junxuan "Johnny" Lu has accepted an offer to become chair for the SOP's Dept. of Biomedical Sciences. He will move to Amarillo and assume his new duties beginning Jan. 1.

Getting to know...

Bill Pulliam Senior Director, Accreditation and Planning Office of the Dean - Amarillo

Bill was born and raised in Clovis, N.M., and moved to Canyon, Texas, in 1982. He earned his bachelor's degree in business from Eastern New Mexico University and his master's degree in business from West Texas A&M University (WTAMU).

Prior to coming to TTUHSC and the SOP in Dec. 2008, Bill spent nearly 18 years at WTAMU as a small business counselor, financial officer and chief information officer. He also held various positions within the oil and gas industry from 1981 to 1988.

Bill has served on several local boards and commissions during his career, including those for the Canyon Independent School District, the United Way of Amarillo and Canyon, the Tyler Street Resource Center,



Left: Bill gets ready to eat some dirt on an annual trip to the mountains of New Mexico. Below: The Pulliam family enjoys a relaxing moment in the blue waters of the Caribbean.



the Canyon Chamber of Commerce, the Canyon Planning and Zoning Commission, Big Brothers Big Sisters and Leadership Amarillo and Canyon.

At the SOP he has also become known for starting the Diners and Dives group.

"I really enjoy our monthly group that seeks out and visits the area's best greasy spoons," he says.



Bill in action on a mountain dirt bike trail in New Mexico.

Bill and his wife, Elizabeth, will celebrate their 25th wedding anniversary in December. They have two sons: Cory is a graphic artist in Richmond, Va., and Conner is a senior at Canyon High School.

In his spare time, Bill enjoys golf, dirt biking and restoring his 1949 Ford pickup.

"I'm not a very good golfer, but I once made a hole-in-one at Palo Duro Creek Golf Course in Canyon," he says. "I also try to go to the mountains in New Mexico and ride dirt bikes twice a year with a group of guys who are all about my age—50-ish years young."

He says he and his family also enjoy traveling to the Caribbean and have visited several islands over the years.

SOP Photo Gallery

SOP students who helped at the Great American Smokeout Nov. 13 at Westgate Mall included (clockwise from top left) Amarillo P1s Jacob Burnett, Trenton Brown, Chad Samuelson, Selcan Kasap, Elnaz Rabiei and Johnson Kang.



Amarillo P1 Kaytlin Huseman helps middle school girls make lip balm at the 2010 WISE Symposium.

CPFI member and Amarillo P1 Elizabeth Neyland prepares some of the toys used to pack shoeboxes for Operation Christmas Child.



P3 Daniel Contreras (left) and P2 Kevin Aloysius demonstrate pill rolling at the 14th Annual Fannin Middle School History Festival in Amarillo.



Sherida Nelson (Instructor, Dept. of Pharmacy Practice - Amarillo) looks on as P2 Glenda Hart takes a blood pressure reading at the 2010 Winter Outreach and Health Fair at the Guyon Sanders Resource Center in Amarillo.



From left to right: P1s Kaytlin Huseman and Sarah Willis with graduate students Naomi Wangler and Alejandra Fernandez at the 2010 WISE Symposium in Amarillo.



Pictured from left to right: SOP friends Paul and Judy Weinstein with Dallas/Fort Worth P4 Ashley Willis and SOP alumna Bimpe Ayanwola (Class of 2010) at a recent scholarship dinner in Dallas.



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