

TECH SCRIPT

TEXAS TECH UNIVERSITY  HEALTH SCIENCES CENTER™

Jerry H. Hodge School of Pharmacy Annual Report | 2024-2025

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THE YEAR IN NUMBERS



88

students in graduating class of 2025



29

students matched with residency programs



1

student went on to a fellowship program



15

students graduated with Pharm.D./MBA dual degrees



6

recieved honors in research designations



94

faculty publications



4

patents



+930k

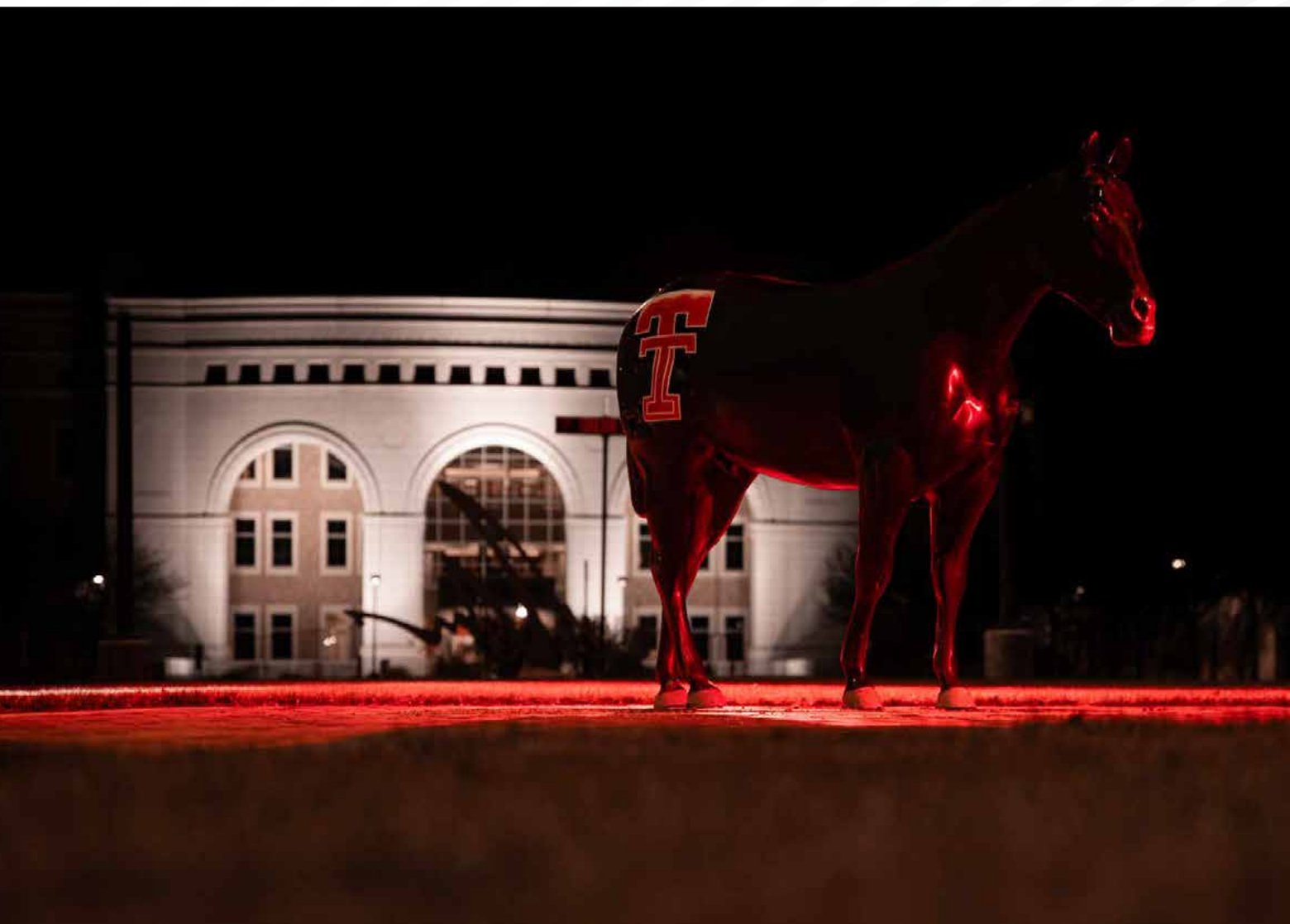
scholarships award total for the 2024-2025 school year

MESSAGE FROM THE DEAN

Dear SOP Team Members, Alumni, and Friends,

Our students and team members have had a productive year, demonstrated from several recognitions won at the local, regional, and national levels. I'm very proud of all the accomplishments we've made. We had a wonderful celebration with the Class of 2025, and a successful launch of the hybrid "Pioneer Pathway" in the Doctor of Pharmacy program.

Grace M. Kuo,
Pharm.D., MPH, Ph.D.
Dean and Professor





ABOUT US



MISSION:

To enhance the lives of patients through innovation and excellence in pharmacy education, practice and research.

VISION:

Transform health care and the lives of the patients we serve.

OUR COMMITMENT: AS A COMMUNITY OF LEARNERS, WE ARE COMMITTED TO:

1. The creation of a student-centered, positive learning community in which each person is dedicated to the pharmacy profession and values excellence in education, practice and research.
2. Collaborative interpersonal relationships - defined as mutual learning, open communication and shared responsibility among faculty, administration and students.
3. Compassionate care for each patient and an unwavering dedication to meet each patient's pharmaceutical care needs.
4. Community involvement and serving the health care needs of the citizens of West Texas. This perspective will be reflected in our doctoral candidates who have a community perspective supported by a sound biologic and behavioral understanding of health care.
5. Work characterized by its excellence and our willingness to change, be progressive, make timely and vigilant decisions, and evaluate our performances against stated goals.
6. Academic and healthcare environments that encourage open debate and dialogue, the introduction of new ideas and practices, innovation through collaboration, and an unwavering commitment to self-improvement, self-renewal and life-long learning.



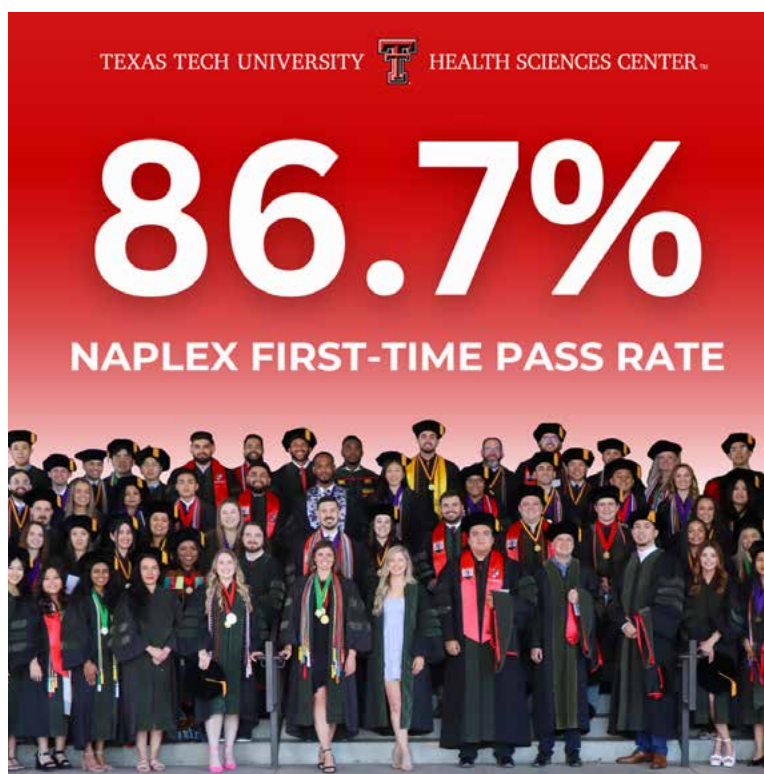
TTUHSCSOP DEVELOPS NEW RESEARCH CENTER

After more than a decade of research growth and recruiting efforts to build strong, collaborative research programs, the TTUHSC Jerry H. Hodge School of Pharmacy (TTUHSCSOP) in Amarillo developed the newest Texas Tech University Health Sciences Center (TTUHSC) research center – the Brain Drug Discovery Center.

Created from two previously existing pharmacy school centers — the Center for Blood-Brain Barrier Research and the Cancer Biology Research Center — the Brain Drug Discovery Center focuses on discovering novel drug targets and treatments for a variety of neurodegenerative diseases.

GRADUATES PROVE READINESS WITH NATIONAL EXAM SCORES

The most recent NAPLEX and MPJE national exam results proved our graduate's readiness to excel as pharmacists. TTUHSC Jerry H. Hodge School of Pharmacy graduates had a first-time NAPLEX pass rate of 86.7%, well exceeding both the state (73.7%) and national (77.5%) averages, and a MJPE first-time pass rate of 88.4%, exceeding both the state (80.6%) and national (76.6%) averages.





TTUHSCSOP SELECTED FOR NACDS FOUNDATION SCHOLARSHIP AWARD

In April, TTUHSCSOP was one of just 10 schools selected for scholarships and grants by the National Association of Chain Drug Stores (NACDS) Foundation, in recognition of innovative and inspiring educational programs. TTUHSCSOP was selected for a scholarship in the Inspiring Interest and Opportunities in Pharmacy Education category for plans to grow the “Pioneer Pathway” to expand access to pharmacy education with the goal of training future pharmacists on care services in rural and other areas of the community. The award was presented at the NACDS Annual Meeting and is an acknowledgement of the hands-on learning and experiences provided to TTUHSCSOP students so they can positively impact community health.



JERRY H. HODGE PASSES AWAY

On July 25, 2024, our school’s namesake and long-time supporter of the Texas Tech University Health Sciences Center, Jerry Hodge passed away. Mr. Hodge was kind, generous, and visionary. He played a key role in the establishment of the TTUHSC Jerry H. Hodge School of Pharmacy in Amarillo, bringing access to quality pharmacy education and delivery of care to the region. Jerry and Margaret’s dedication to the community and their generous and giving spirits have built a legacy that will continue to inspire our commitment to the future of health in Amarillo and beyond.



FACULTY ACHIEVEMENTS

LUEDTKE HONORED BY PEDIATRIC PHARMACY ASSOCIATION



Sherry Luedtke, Pharm.D., received the 2024 Jeffrey K. Low Service Award at the Pediatric Pharmacy Association (PPA) annual meeting. The Jeff Low Award honors individuals that have committed a sustained dedication to PPA as an organization through work on committees, the board, and to the pediatric profession.

MACLAUGHLIN FEATURED IN THE NEW YORK TIMES

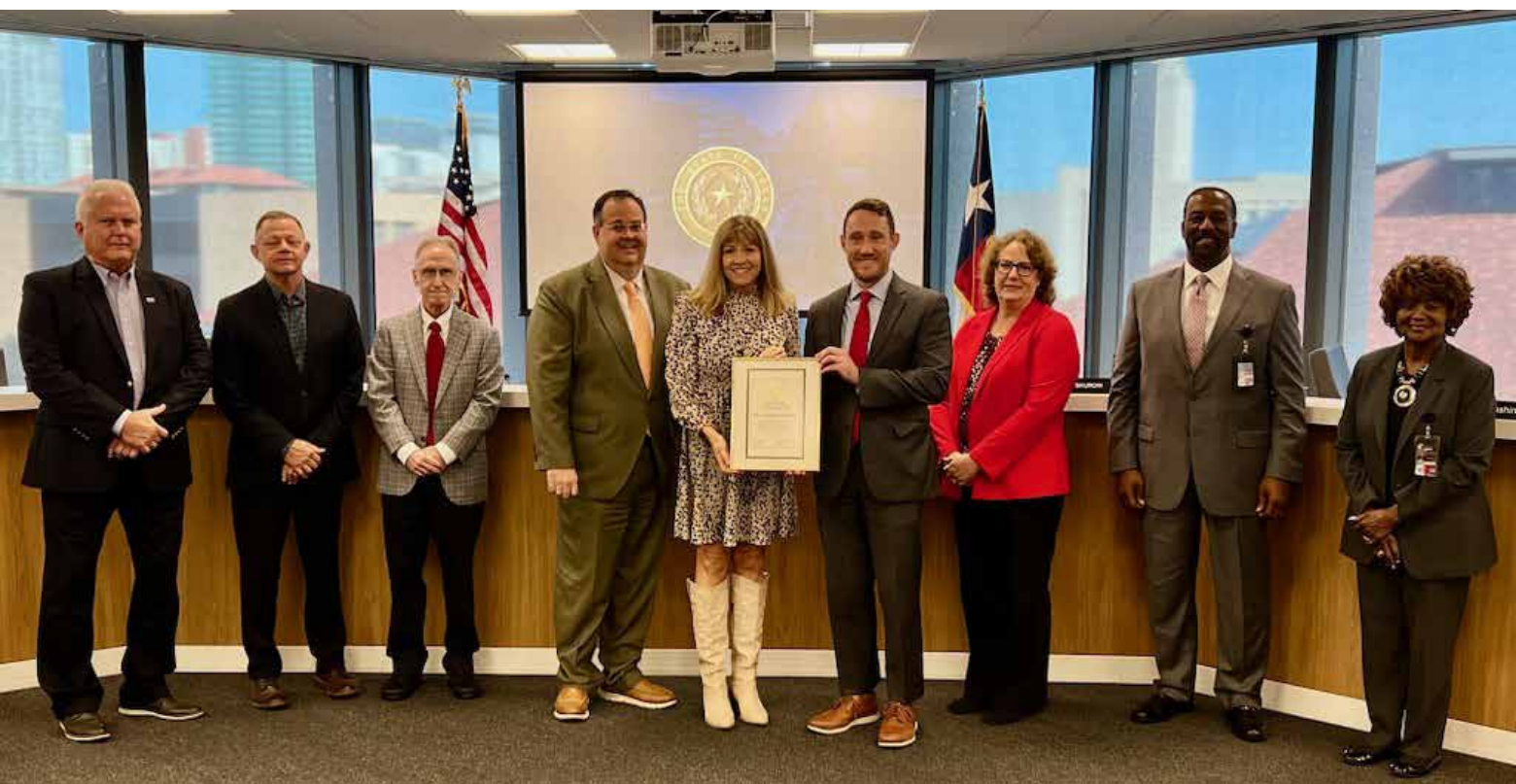


Eric MacLaughlin, Pharm.D., collaborated with The New York Times for an article about why properly storing medications is crucial for maintaining their safety and potency. The article, titled “Medication Mistakes Pharmacists Want You to Stop Making” was published in August 2024.

MAHAN RECEIVES INAUGURAL AWARD FROM ASCP FOUNDATION



In November, Becky Mahan, Pharm.D., was the inaugural recipient of the ASCP Foundation: Neil Marshall Patient Safety Award. Mahan’s practice site team at Hendrick Home Health nominated her and she received the award, which recognizes focus on improving patient safety through direct/indirect patient care and/or dispensing activities, at the ASCP Annual Meeting



SHAWHART'S SERVICE RECOGNIZED BY COMMISSION ON STATE EMERGENCY COMMUNICATIONS

In September, Jeanie Shawhart, Pharm.D., was recognized at the Commission on State Emergency Communications meeting for her years of service as director of the Texas Panhandle Poison Center (TPPC). For two and a half decades, she led the TPPC with grace and grit and inspired others with her dedication, wisdom, and unwavering commitment to excellence.

EDDY HONORED WITH ACCP AWARD



In October, Emily Eddy, Pharm.D., received the Esteemed New Practitioner Award from the American College of Clinical Pharmacy (ACCP) Community-based PRN. The award recognizes outstanding and sustained contributions to the advancement of community-based practice

JONES AWARDED STRIPE DOUBLE HELIX



In November, Shawn Jones, Ph.D., received a STRIPE Double Helix Award from the American Society of Pharmacovigilance. Jones was recognized in the Excellence in Advancing Pharmacogenomics Through Collaboration award category, which honors leaders who have driven significant advancements in pharmacogenomics by fostering collaboration across disciplines, organizations, and sectors. Their work has helped bridge gaps in science, practice, and policy, accelerating the adoption of PGx.

KLEIN ONE OF TEN TO RECEIVE APHA FELLOW AWARD



Mary Klein, Pharm.D., was one of 10 recipients selected by the APhA-APPM for the 2024-2025 American Pharmacists Association Fellow Award. The award recognizes exemplary professional achievements in professional practice and outstanding service to the profession.

COX HONORED WITH EXPERIENTIAL EDUCATION AWARD



Craig Cox, Pharm.D., was selected as the 2025 recipient of the American Association of Colleges of Pharmacy (AACCP) Excellence in Experiential Education Award. The award is given by the Experiential Education Section of AACCP that promotes excellence in experiential education, develops, maintains and supports networking, fosters innovation, and disseminates best practices.

AHMED JOINS TAMEST ELITE GROUP



Mahmoud Ahmed, Ph.D., was one of two TTUHSC researchers recognized as Texas Academy of Medicine, Engineering, Science & Technology (TAMEST) Protégés, joining an elite group of early-career researchers selected for the TAMEST 2025 Annual Conference: Transformational Breakthroughs. The TAMEST Protégé Program serves as a mentorship tool for researchers, providing them with guidance from established TAMEST members. This honor reflects both individual excellence and TTUHSC's commitment to fostering the next generation of scientific pioneers.

EIGHT PRECEPTORS OF THE YEAR NAMED

Each year students have the opportunity to nominate their favorite preceptor for the Preceptor of the Year Award. A faculty and adjunct faculty member are selected from each campus to receive the award. The 2025 preceptor of the year awardees are:

Becky Mahan, Pharm.D.,
Faculty, Abilene

Grace Zalesak, Pharm.D.,
Adjunct Faculty, Abilene

Kenna Payne, Pharm.D.,
Faculty, Amarillo

Vida Haddad, Pharm.D.,
Adjunct Faculty, Amarillo

Lisa Chastain, Pharm.D.,
Faculty, Dallas

Carlos Irula, Pharm.D.,
Adjunct Faculty, Dallas

Craig Cox, Pharm.D.,
Faculty, Lubbock

Shalyn Cox, Pharm.D.,
Adjunct Faculty, Lubbock

AHMED INVESTIGATING CARDIAC CELL REGENERATION



When a patient is experiencing heart failure, a leading cause of death worldwide, they begin to lose healthy and functioning cardiac cells. Heart failure causes these once-flexible cells to develop into fibrotic cells that are no longer able to contract and relax. This stiffening of the cardiac cells compromises their ability to carry blood efficiently to the rest of the organs in the human system. Because humans cannot regenerate these cardiac cells, the patient faces a long road to recovery marked by preventative or symptomatic treatments.

However, some mammals do have the ability to regenerate cardiac cells, though generally for a specific amount of time immediately following birth. With that in mind, Mahmoud Salama Ahmed, Ph.D., and an international team of researchers have completed an investigation to uncover novel therapeutics or existing therapeutic regimens previously approved by the Food and Drug Administration (FDA) for cardiac regeneration. Their study (“Identification of FDA-approved drugs that induce heart regeneration in mammals”) was published in March 2024 in *Nature Cardiovascular Research*.

“This is a study for regenerative therapy more than symptomatic treatment,” Ahmed added.

Ahmed, a professor of pharmaceutical sciences at the TTUHSCSOP, worked on the study while at UT Southwestern Medical Center. He said the current research is based upon findings from a 2020 study from the UT Southwestern Medical Center laboratory of Hesham Sadek, M.D., Ph.D.

In that study, investigators demonstrated that mice can indeed regenerate cardiac cells upon genetic deletion of two transcription factors: *Meis1* and *Hoxb13*. Armed with that information, Ahmed and his collaborators started their latest study in 2018 at UT Southwestern Medical Center. They began by targeting the transcription factors (*Meis1* and *Hoxb13*) using paromomycin and neomycin, two antibiotics from the aminoglycoside class.

“We developed inhibitors to switch off the internal transcription and restore the regenerative capacity of cardiac cells,” Ahmed added.

Ahmed said the structure scaffold of paromomycin and neomycin indicated they had the potential to bind to and inhibit the *Meis1* transcription factor. To understand how the binding might occur, the team first had to uncover the molecular mechanisms of paromomycin and neomycin and learn how they bind to *Meis1* and *Hoxb13* genes.

“We started testing in mice suffering from myocardial infarction or ischemia,” Ahmed explained. “We found that both of them (paromomycin and neomycin) work synergistically with each other to elevate

the ejection fraction (the percentage of blood leaving the heart each time it pumps), so the contractility of the ventricles (heart chambers) is significantly improved. It enhanced the cardiac output and reduced the fibrotic scar that was getting down into the heart.

The team collaborated with scientists from the University of Alabama at Birmingham to administer paromomycin and neomycin to pigs suffering from myocardial infarction. They discovered the pigs suffering from myocardial infarction had better contractility, ejection fractions and overall improved cardiac output when they were administered the paromomycin and neomycin

In future research, Ahmed is interested in combining the binding profiles of paromomycin and neomycin into one molecule rather than two. If successful, he said the new molecule will be able to avoid any adverse or potentially adverse effects associated with antibiotic resistance

“We want to have newly synthesized small molecules targeting Meis1 and Hoxb13,” Ahmed said. “We want to go forward for further investigation in pigs regarding toxicological studies. Later on, hopefully this will be an introduction for clinical trials in humans. The good thing about that is we are using a couple of FDA-approved drugs with established safety profiles and well-known side effects, so we are cutting out some milestones regarding gaining approval for the investigation of a new drug. This is the beauty of drug repurposing: We can go to the clinic earlier so we can begin to rescue some lives.”

MCMAHON RECEIVES NIH GRANT TO HELP BUILD TTUHSC RESEARCH CAPACITY



As a leader in academic health and biomedical research training, the TTUHSC covers the West Texas region that comprises half of the state's land mass and is home to 10% of its population. Research at TTUHSC drives innovation and discovery, changing the lives of those it serves and attracting talented faculty, staff and students.

During the latest reporting period (2020-2022), TTUHSC received an average of \$12,539,679 annually in National Institutes of Health (NIH) funding. In an effort to grow research excellence at TTUHSC, a project team led by Lance McMahon, Ph.D., senior vice president for research and innovation, received a three-year, \$1.16 million grant to conduct a capacity-building study. The grant is one of the first at TTUHSC that was made possible when the university was officially designated as a Hispanic-Serving Institution in 2022 by the US Department of Education.

Other members of the team include Min Kang, Pharm.D., Christine Garner, Ph.D., R.D., and Leslie Shen, Ph.D., from the TTUHSC School of Medicine; Phil Sizer Jr., P.T., Ph.D., Troy Hooper, P.T., Ph.D., and Julie St. John, Dr.P.H., from the TTUHSC School of Health Professions; Mike Blanton, Ph.D., from the TTUHSC Graduate School of Biomedical Sciences; Ulrich Bickel, M.D., from the

TTUHSC Jerry H. Hodge School of Pharmacy; and Alyce Ashcraft, Ph.D., R.N., from the TTUHSC School of Nursing.

“This is what is called a cooperative agreement,” McMahon said. “We are going to interact with program staff at the NIH; these are the people who help establish the research priorities of the different NIH institutes. They’re plugged in, so they can give us feedback, and we can help describe to them who we are, what we do and what our strengths and weaknesses are.”

McMahon said five other universities also received funding from the NIH to take on the same project at their schools. The TTUHSC team will interact with and conduct peer comparisons to compare best practices with the other universities who were funded.

Broadly defined, the grant is for building research capacity. TTUHSC has been well known for basic laboratory research, but McMahon said the university is beginning to create a vision that is committed to developing, expanding and strengthening clinical and community-based research. He said that’s important because there are substantial health disparities in the region created by rural locations and geographical distances from urban centers.

“Health care is clustered in major metropolitan areas in our region: Albuquerque, Oklahoma City, Dallas, Austin, San Antonio and even Houston,” McMahon said. “We have health disparities that are a great concern for our communities, and as an academic health center, it is our responsibility to help understand and address the health disparities of our region. That’s what this grant will help us accomplish.”

SMITH DEVELOPS METHOD TO MEASURE BLOOD-BRAIN BARRIER PERMEABILITY ACCURATELY



For decades, scientists across the globe have investigated methods to accurately measure drug permeability across the blood-brain barrier, a compact layer of cells that protect the brain from potentially dangerous substances and microbes. They struggled with a number of parameters, such as blood flow and binding to plasma proteins, which were shown to impact permeability in different ways.

In research published in the December 2024 issue of *Fluids and Barriers of the CNS* (“Brain endothelial permeability, transport and flow assessed over 10 orders of magnitude using the in situ brain perfusion technique”), Quentin R. Smith, Ph.D., from the Department of Pharmaceutical Sciences at the Texas Tech University Health Sciences Center (TTUHSC) Jerry H. Hodge School of Pharmacy, sought to reconcile discrepancies in the field and provide accurate methods for measuring permeability over a very broad range spanning from poorly crossing polar compounds (compounds with a positive or

negative charge) to rapidly crossing approved central nervous system (CNS) clinical drugs.

Fluids and Barriers of the CNS is the flagship journal for the blood-brain barrier field, with a journal impact factor of 5.9, placing it in the top 5-6% of all journals. During the journal's manuscript review, the paper was described as "game changing" and "...clearly the most important manuscript for anyone that considers themselves studying drug delivery in vivo (in a living organism)."

Smith's team for the project included Haritha Mandula, Ph.D., Jagan Mohan R. Parepally, Ph.D., Fancy Thomas, Ph.D., Helen R. Thorsheim, Ph.D., Abraham J. Al-Ahmad, Ph.D., and Thomas J. Abbruscato, Ph.D., all from the TTUHSC Department of Pharmaceutical Sciences; Jun Oki, Ph.D., from the TTUHSC Department of Pharmaceutical Sciences and the National Institute on Aging; Per Ask, Ph.D., from Linköping University (Linköping, Sweden); David S. Hage, Ph.D., from the University of Nebraska-Lincoln; and Peter J. Robinson, Ph.D., from the National Institute on Aging.

Smith, who began studying the blood-brain barrier in 1981 while working at the National Institutes of Health, said there had been much confusion in the field regarding the ability of drugs to cross the vasculature of the brain, which for many agents is highly restrictive and forms the core of what is termed the "blood-brain barrier." Controversy grew regarding how best to accurately assess barrier permeability, distinct from factors such as blood flow and plasma protein binding, which greatly influence brain uptake, particularly for more lipophilic agents (those which dissolve in lipids or fats), which includes the great majority of drugs currently used in treating CNS disorders.

"Researchers were questioning how best to measure permeability, and no single approach at that time gave a clear answer," Smith said. "Some scientists reverted to just the simplest measurement, such as the brain/blood concentration ratio. But there was no broad agreement on permeability, particularly for agents in the higher realm of lipid solubility, that includes most clinical agents. Our view was to go back and very systematically develop a highly robust model and data set, allowing one to very carefully determine permeability, adjusting and mathematically incorporating the contributions of blood flow and intravascular binding, as well as other factors. The results were striking, providing values 10, 100 and 500 times greater than prior estimates."

The project team evaluated 120 compounds, revealing that many current CNS drugs permeate the barrier and equilibrate in the brain in less than 10 minutes. The findings challenged previous literature and demonstrated that the equilibration rate for a significant number of CNS drugs is much greater than previously realized.

"We showed that many of the drugs that are used and approved for CNS uptake go into the brain quite well," Smith said. "They've gone through the FDA (Food and Drug Administration) approval process, and they've been selected essentially for their ability to get past the blood-brain barrier. A good number of agents in the benzodiazepine, antidepressant, antipsychotic, stimulant and antiepileptic drugs go in as quickly as the blood flow can deliver them. It's amazingly rapid. For such agents, we had to have extremely accurate measurement of cerebral blood flow."

The project also highlighted the role of plasma proteins which, for many lipophilic agents can serve an

additional brain delivery role beyond that of free drug in plasma. In effect, plasma-bound drugs can dissociate to maintain the intervascular free drug concentration, which otherwise would show rapid depletion under conditions of higher extraction (50-99%). Smith said Valium is a good example of a drug that shows this behavior. Under condition of rapid uptake, Valium from the plasma protein-bound pool can redistribute to maintain free levels to sustain uptake some 10-20-fold greater than that allowed by the free pool alone.

“Our data explained findings from many prior studies where the role of the protein-bound drug had been in question,” Smith said. “With our new model, the findings provide a simple answer consistent across the field. It really was quite exciting to have these ‘aha’ moments where everything comes together, and you say to yourself, ‘Oh, that’s how it all works.’”

One example where the new model provides valuable insight is in the urgent treatment of repetitive epileptic seizures. When a patient experiences a series of seizures in rapid succession, it’s extremely hard on the brain, causing some cells to overwork and burn out. Smith said the treatment of this condition is a medical emergency where literally “time is brain,” so physicians want an agent with a simple administration format that stops the seizures as quickly as possible.

During the development of such products, there was significant discussion over which agent exhibited the greatest brain permeability. Smith’s team studied many of the agents used in the treatment of this condition, and they found that most had very high values in their model. In terms of rapid attainment of therapeutic levels, Smith said other factors may well be of greater importance, including the administration site and how rapid absorption is from such sites under real world conditions in the field. The results also have important implications for conditions of low brain blood flow, such as in ischemic stroke or brain bleeds.

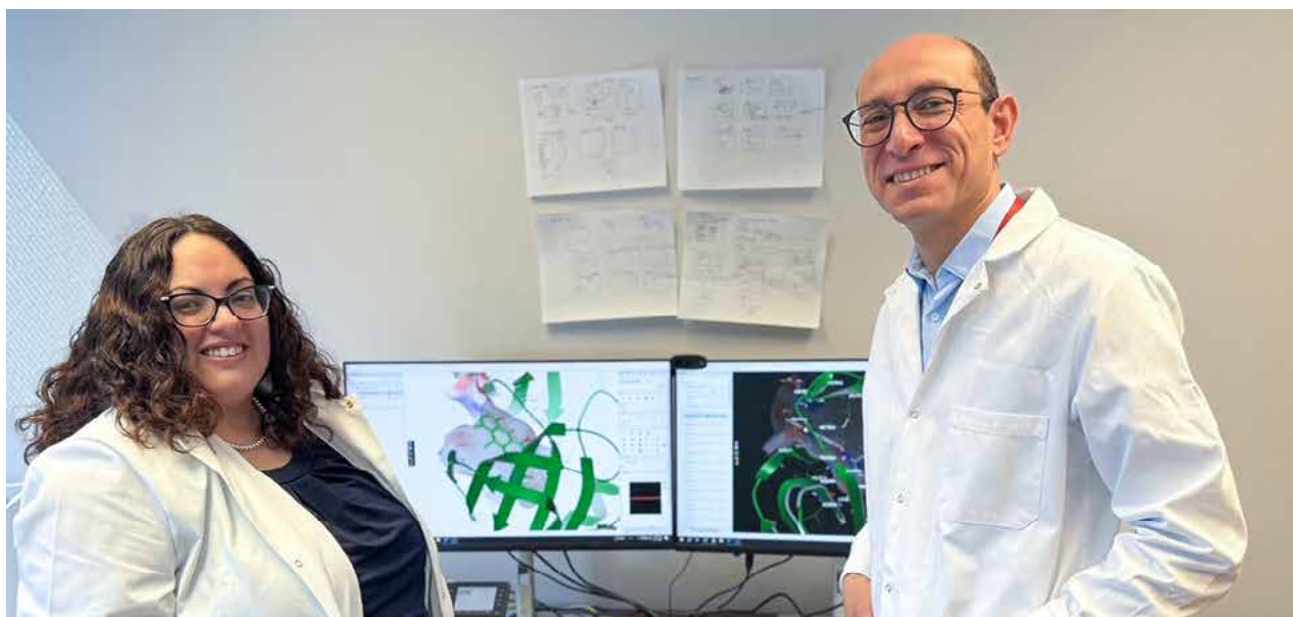
“There are a number of discrepancies in the literature, and we show how those got going,” Smith said. “The entire data set gives a linear relation for permeability that holds over 10 orders of magnitude in solute lipid solubility. We also found a strong inverse relationship with drug size that was highly statistically significant. Overall, we accounted for more than 95% of the variability in the data from drugs that cross the blood-brain barrier by passive diffusion.”

The study also looked at those compounds that do not go into the brain well. This is often because the compound is polar or highly charged. In addition, a significant number of biological compounds are transported out of the brain by active efflux transporters. These efflux transporters have a very important role. Scientists have speculated on the fraction of drugs that cross the barrier well. Most current estimates say 95-99% are kept out, though Smith suspects the actual number is lower — maybe 65-80%.

Smith said he has learned so much during his 50-plus years of working in science. He expects that 30 years from now, the blood-brain barrier field will be far ahead of what is known today.

“That is one of the great pleasures of being a scientist,” Smith said. “We get a front row seat in a movie showing how life works and what are the critical factors behind many things. And we are so proud that this work is fostered and supported by TTUHSC. The totality of the biomedical advances is truly amazing.”

AHMED AND WILKERSON SEEK NOVEL THERAPIES FOR CHRONIC PAIN



Chronic pain, a common and debilitating condition, often leads practitioners to prescribe opioids in escalating doses. The prescription of opioids has created a serious nationwide crisis that killed more than 107,000 Americans from December 2020 through December 2021, according to a report by the American Medical Association (“Nation’s opioid-related overdose and death epidemic continues to worsen”). Given these realities, an urgent need exists to develop novel non-opioid and non-addicting therapies capable of effectively managing chronic pain.

To help spur the development of these therapies, the National Institute of Neurological Disorders and Stroke at the National Institutes of Health awarded a five-year, \$1.94 million grant (“Identification of novel lead EphB1/2 tyrosine kinase inhibitors targeting peripheral neuropathic pain”) to Mahmoud Salama Ahmed, Ph.D. The project team includes TTUHSC colleagues Jenny Wilkerson, Ph.D., (co-investigator) and Heba Ewida, Ph.D., and graduate student Harrison Benson.

In previous behavioral research studies, Ahmed’s laboratory demonstrated significant reversal of thermal hyperalgesia (heightened sensitivity to heat or thermal stimuli) and mechanical allodynia (pain from a light touch, pressure or movement) induced by experimental nerve damage and a sciatic nerve constriction injury.

Ahmed’s previous research also revealed the synergism of three tetracycline family members: minocycline, chlortetracycline and demeclocycline.

“That study showed the competitive inhibitory profile of chlortetracycline and the catalytic binding domain of EphB1 tyrosine kinase (transmembrane proteins that mediate communication between cells),” Ahmed explained. “It also showed that the tetracycline combination reversed thermal hyperalgesia and mechanical allodynia in various pain models. However, the IC₅₀ (the amount of a drug needed to inhibit a biological process by 50%) for this approach is in the low micromolar range, requiring a near maximal dose of all three antibiotics in combination.”

A micromolar is one-millionth (10^{-6}) of a mole, which is a unit of measurement representing a specific number of molecules or atoms. For some drugs, concentrations this high in humans are difficult to achieve without producing unwanted side effects.

While working at UT-Southwestern, Ahmed published a paper at the proceedings of the National Academy of Sciences resolving the crystal structure of one of the tetracyclines with the EphB1 tyrosine kinase domain. Ahmed said this kinase is integrated into the progression of peripheral neuropathic pain.

“However, it doesn’t make sense that when we have a patient that’s suffering from a peripheral neuropathic pain, we will give them this combo of the tetracyclines,” Ahmed said. “Because in the long-term, some of the adverse effects the patient might develop include antibiotic resistance. Also, the binding of the tetracyclines to the kinase domain was not optimum. Based on that, I started to look at the structure again, and I came up with new structures to achieve more potency and selectivity.”

Ahmed then began collaborating with Wilkerson at TTUHSC. First, Ahmed’s lab conducted the design phase, synthesized (collected) other evidence and findings from past research and conducted biochemical validation. When the project was set to scale up and conduct in vivo, pre-clinical models, they turned to Wilkerson’s lab.

Wilkerson has 17 years of experience researching the involvement of the immune system in various chronic neuropathic pain models. Using this expertise, Wilkerson’s laboratory will examine the potency of these new compounds to reverse or prevent behaviors associated with chronic neuropathic pain. Her laboratory will also determine if therapeutically relevant doses of these new compounds produce untoward behavioral side effects.

“This project holds a lot of promise because, for so many people, opioids and gabapentinoids are the main options to treat chronic pain, and we know that these drugs often do not work to adequately control pain,” Wilkerson said. “Additionally, this project is very exciting because we might be able to prevent chronic pain from developing.”

As they prepare for this latest study, Ahmed said they have 50 to 60 molecules in hand that exhibit better activity when compared to the tetracyclines used to target the EphB1 tyrosine kinase domain. Two of these molecules are undergoing preclinical evaluation for reversing all the key parameters for peripheral neuropathic pain, such as thermal hyperalgesia and mechanical allodynia.

“The EphB1/2 tyrosine kinase domain inhibitors have the potential to reverse the thermal hyperalgesia and the mechanical allodynia, and those stimuli are interrelated to peripheral neuropathic pain,” Ahmed said. “Our overall goal is to pharmacologically examine whether selective EphB1/2 tyrosine kinase inhibition is necessary and sufficient to reverse and/or block peripheral neuropathic pain development.”

The Ahmed-Wilkerson team hypothesizes that their novel small molecules, which are not related to the tetracycline scaffold, will inhibit EphB1/2 tyrosine kinase signaling.

“These small molecules could prove to be novel tools to investigate the mechanisms that either block or reverse peripheral and central nervous system neuronal activation and nerve damage,” Ahmed said. “This will lead to decreased neuropathic pain-related biomarkers and behaviors associated with peripheral neuropathic pain.”



DAS SELECTED AS FELLOW BY NAI

Hiranmoy Das, Ph.D., a professor of pharmaceutical sciences at the TTUHSCSOP, has been named a Fellow of the National Academy of Inventors (NAI). NAI Fellowship is the highest professional distinction awarded solely to inventors, and this year's class is comprised of 170 individuals.

The 2024 cohort of Fellows exemplifies the NAI's belief that groundbreaking innovation knows no bounds and inventors can be found everywhere. This is evident in the fact that the honorees represent 39 U.S. states and 12 countries.

Das, who has been a member of NAI since 2018, said becoming an NAI Fellow makes him feel like he's achieved one of the significant career milestones.

"Professionally, it is an honor to be associated with the extraordinary league of great innovative scientists," Das added.

Das's primary research focuses on stem cell therapy using stem cells collected from human tissue to treat degenerative diseases. His research interests also include the molecular mechanisms regulating the activation and functionality of monocytes (white blood cells) in the context of inflammation and identifying molecules responsible for recognizing various tumor cells (such as ovarian, breast and cervical) by human gamma delta T cells.

Since 2018, Das has received or partnered on five patents, including Patent # US 2021/0189334 A1 ("Corneal epithelial cells and their products for treating corneal diseases." Publication date 06-24-2021); Patent # WO 2019/241462 A1("Stem cells for the treatment for conditions and diseases." Publication date 12-19-2019); Patent # US 2019 / 0091310 A ("Nonreleased IL-12 for therapy of cancer." Publication Date 3-28-2019); Patent # 8669106 ("Erythrocytes differentiated in vitro from nanofiber expanded CD133+ cells." Publication date: 03-11-2014); and Patent # 20090285892 ("Methods and systems for expanding AC133+ cells and directing differentiation." Publication date: 11-19-2009).

“There is great potential for stem cell therapies to replace the damaged cells and tissues underlying various medical conditions of the blood, eye and mouth,” Lance R. McMahon, Ph.D., senior vice president of research and innovation at TTUHSC explained. “TTUHSC is proud of Dr. Das’s groundbreaking work and its potential to treat disease with commercially viable products and approaches.”

The 2024 NAI Fellows hail from 135 research universities, governmental and non-profit research institutions worldwide and their work spans across various disciplines. They are renowned researchers holding prestigious honors and distinctions such as the Nobel Prize, the U.S. National Medal of Technology and Innovation, the National Medal of Science and membership to the National Academy of Sciences, Engineering and Medicine. These incredible inventors also collectively hold more than 5,000 issued U.S. patents, and their innovations are making significant and tangible societal and economic impacts today and will continue well into the future.

Since its founding in 2012, the NAI Fellows program has grown to include 2,068 exceptional researchers and innovators who hold more than 68,000 U.S. patents and 20,000 licensed technologies. NAI Fellows are known for the societal and economic impact of their inventions, contributing to major advancements in science and consumer technologies. Their innovations have generated more than \$3.2 trillion in revenue and 1.2 million jobs. The 2024 Class of Fellows will be honored and presented their medals by a senior official of the United States Patent and Trademark Office at the NAI 14th Annual Meeting June 26 in Atlanta.



MATHYS RECOGNIZED AS AAPP FELLOW

Monica Mathys, Pharm.D., was selected as part of the inaugural class of Fellows of the American Association of Psychiatric Pharmacists (AAPP). The AAPP Fellows Program recognizes members who have demonstrated excellence in advancing the practice of psychiatric pharmacy and have distinguished themselves in advancing the mission and goals of AAPP, thereby promoting public awareness of the profession. Mathys was recognized at the 2025 AAPP Annual Meeting in April.



GERMAN JOINS GROWING LIST OF SENIOR MEMBERS FOR NAI

Neuroinflammation, a swelling of brain tissue increasingly associated with Alzheimer's and Parkinson's disease, can limit blood flow to areas in the brain. This disruption in blood supply to the brain can inhibit the body's natural disease-fighting mechanisms and has been linked to dopamine, a key chemical messenger of the nervous system.

There is increasing interest in determining whether modulating dopamine levels at the inflammation site can stop or even reverse neurodegeneration. To help make that determination, Nadia German, Ph.D., director of the Medicinal Chemistry program at the TTUHSCSOP, and former TTUHSC Department of Pharmaceutical Sciences colleague Constantinos Mikelis, Ph.D., received a U.S. patent in 2022 for a chemical that targets the brain's dopamine transporter (DAT), one of the ways by which dopamine levels in the brain can be controlled.

To recognize this and other significant contributions to biomedical science and engineering, German has been named to the National Academy of Inventors (NAI) 2025 class of Senior Members. She will be inducted June 23-26th during the Senior Member Induction Ceremony at NAI's 14th Annual Conference in Atlanta.

The NAI is a member organization comprising U.S. and international universities and governmental and non-profit research institutes with more than 4,600 individual inventor members and Fellows spanning more than 260 institutions worldwide. The 2025 class of Senior Members is comprised of 162 emerging inventors from NAI's Member Institutions. It represents the largest class of NAI Senior Members to date who come from 64 NAI Member Institutions across the nation. Combined, they are named inventors on more than 1,200 U.S. patents.

During her career, German has received several patents with the Texas Tech University System and another she received before coming to TTUHSC.

"At TTU and TTUHSC, I have two major families of patents: compounds to treat pain and compounds to treat neuroinflammatory conditions and cancer," German added.

In addition to her patents, German was among 21 researchers and companies selected in 2023 to join the Accelerator for Cancer Therapeutics, a Texas Medical Center Innovation (TCMi) program that supports investigators and early-stage biotechnology companies conducting innovative and novel work

in cancer therapeutics. The nine-month Accelerator for Cancer Therapeutics program is funded by the Cancer Prevention and Research Institute of Texas and partners with the Gulf Coast Consortia and the University of Texas Medical Branch.

German's TCMi project focused on developing a small molecule treatment for triple-negative breast cancer and translating cancer therapeutics from the preclinical to clinical phases of development. In short, she identified a class of polypharmacology compounds with selectivity to cancer cells over non-cancerous breast epithelial cells. In addition, these compounds significantly reduce toxicity toward non-cancerous cells when used in combination with known chemotherapeutics such as doxorubicin, cisplatin and others. This advantage can potentially translate to a much safer treatment and increased survival rate for patients with metastatic triple-negative breast cancer, one of the most aggressive breast cancer types.

She also earned recognition in 2023 as Outstanding Faculty of the Year and Outstanding Mentor of the Year for the TTUHSC Graduate School of Biomedical Sciences, demonstrating how important mentoring is to her career. She said the NAI Senior Member designation is important to her personally and professionally because it recognizes her contributions to the field of medicinal chemistry and drug discovery.

"It reinforces my commitment to this field, but it also connects me to a network of innovators, allowing for new collaborations and opportunities to translate my research into real world clinical applications," German said.

PEER REVIEWED

IMMUNOTHERAPEUTICS & BIOTECHNOLOGY

- **Sajib MS**, Zahra FT, Lamprou M, Akwii RG, Park JH, Osorio M, Tullar P, Doci CL, Zhang C, Huveneers S, Van Buul JD, **Wang MH**, **Markiewski MM**, **Srivastava SK**, Zheng Y, Gutkind JS, Hu J, **Bickel U**, Maeda DY, Zebala JA, Lionakis MS, Trasti S, Mikelis CM. Tumor-induced endothelial RhoA activation mediates tumor cell transendothelial migration and metastasis. bioRxiv. 2024 Sep 24;. doi: 10.1101/2024.09.22.614304. PubMed PMID: 39372784; PubMed Central PMCID: PMC11451620.
- **Karbowiczek M**, **Kalvala A**, Silwal A, **Patel B**, **Kasetti A**, **Shetty K**, Cho JH, Lara G, **Daugherty B**, Diesler R, Pooladanda V, Rueda B, Henske E, Yu J, **Markiewski M**. Extracellular vesicles modulate integrin signaling and subcellular energetics to promote pulmonary lymphangioleiomyomatosis metastasis. Res Sq. 2025 Mar 20;. doi: 10.21203/rs.3.rs-5390547/v1. PubMed PMID: 40166013; PubMed Central PMCID: PMC11957204.
- Kalvala AK, Silwal A, **Patel B**, Kasetti A, Shetty K, Cho JH, Lara G, Daugherty B, Diesler R, Pooladanda V, Rueda BR, Henske EP, Yu JJ, **Markiewski M**, **Karbowiczek M**. Extracellular vesicles regulate metastable phenotypes of lymphangioleiomyomatosis cells via shuttling ATP synthesis to pseudopodia and activation of integrin adhesion complexes. bioRxiv. 2024 Sep 10;. doi: 10.1101/2024.09.09.611297. PubMed PMID: 39314494; PubMed Central PMCID: PMC11419057.
- Silwal A, Reese B, **Patel B**, Li Y, Kolev MV, **La-Beck NM**, **Karbowiczek MM**, Markiewski MM. TP53 Codon 72 Polymorphism Impacts Macrophage Activation through Reactive Oxygen Species-Dependent Cell Signaling Alterations. J Immunol. 2024 Dec 15;213(12):1844-1857. doi: 10.4049/jimmunol.2400212. PubMed PMID: 39451031; PubMed Central PMCID: PMC11611636.
- **Back PI**, Yu M, Modaresahmadi S, Hajimirzaei S, Zhang Q, Islam MR, Schwendeman A, **La-Beck NM***. Immune implications of cholesterol-containing lipid nanoparticles. ACS Nano 2024 Oct 22;18(42):28480-28501. doi: 10.1021/acsnano.4c06369. IF 16.2
- **La-Beck NM*** and Owoso J. Updates and emerging trends in the management of immune-related adverse events associated with immune checkpoint inhibitor therapy. Asia Pac J Oncol Nurs. 2024 Jul 4;11(9):100549. doi: 10.1016/j.apjon.2024.100549. IF 2.4
- **La-Beck NM***, Lee YR, Patel J, Yang H, Stout MA, Kologey AD, Rueswald A, **Alvarez CA**. Clinical characteristics and patterns of immune responses in COVID-19 patients from a rural community hospital: a case series. Cureus 2024;16(6): e61600. doi:10.7759/cureus.61600. IF 1.2

- Anchordochuy, Artzi N, Balyasnikov I, Chan W, Exner A, Gabizon A, Peer D, Popovtzer R, **La-Beck NM**, Mitchell M, Lai S, Muzykantov V, Nguyen J, Godin B, Moghimi SM, Lammers T, Ricco M, Decuzzi P, Serkova N, Brenner J, Barenholz Y, Sing R, Schroeder A, Schwendeman A, Straehla J, Teesalu T, Tilden S, Simberg D. Mechanisms and Barriers in Nanomedicine: Progress in the Field and Future Directions. ACS Nano. 2024 May 20. Online ahead of print. doi: 10.1021/acsnano.4c00182. IF 16.2
- **Anderson TS, McCormick AL**, Smith SL, **Lowe DB**. Modeling antibody drug conjugate potential using a granzyme B antibody fusion protein. BMC Biol, 22(1):66, 2024.
- **Okpalanwaka IF, Daugherty EA**, McCormick AL, Anderson TS, Smith SL, Lawrence C, **Lowe DB**. A PD-L1 x CD3 bispecific antibody enhances the anti-tumor efficacy of regorafenib in pre-clinical colon cancer models. AACR Special Conference in Cancer Research: Tumor Immunology and Immunotherapy, Boston, MA, 18-21 Oct. 2024. (Selected for an AACR Scholar-in-Training award)
- Taylor JL, Kokolus KM, Basse PH, Filderman JN, Cosgrove CE, Watkins SC, Gambotto A, **Lowe DB**, Edward RP, Kalinski P, Storkus WJ. Therapeutic anti-tumor efficacy of DC-based vaccines targeting TME-associated antigens is improved when combined with a chemokine modulating regimen and/or anti-PD-L1. Vaccines, 12(7):777, 2024.
- Gupta N, **Curcic M, Srivastava SK**. Proguanil Suppresses Breast Tumor Growth In Vitro and In Vivo by Inducing Apoptosis via Mitochondrial Dysfunction. Cancers (Basel). 2024 Feb 22;16(5):872. doi: 10.3390/cancers16050872.PMID: 38473234
- **Gaikwad S, Srivastava SK**. Reprogramming tumor immune microenvironment by milbemycin oxime results in pancreatic tumor growth suppression and enhanced anti-PD-1 efficacy. Mol Ther. 2024 Sep 4;32(9):3145-3162. doi: 10.1016/j.ymthe.2024.07.029. Epub 2024 Aug 3.PMID: 39097773
- Schreiber AR, Kagihara JA, Corr BR, Davis L, Lieu C, Kim S, Jimeno A, Camidge DR, Williams J, Heim AM, Martine A, DeMattei JA, Holay N, **Triplett TA**, Eckhardt SG, Litwiler K, Winkler J, Piscopio AD and Diamond JR. First-in-Human Dose-Escalation Study of the Novel Oral Depsipeptide Class I-Targeting HDAC Inhibitor Bacoepsin (OKI-179) in Patients with Advanced Solid Tumors. Cancers. 2024; 16 (1):91. doi: 10.3390/cancers16010091
- Ozonoff A, et al. (**Triplett TA** and other members of the IMPACC study group). Features of acute COVID-19 associated with post-acute sequelae of SARS-CoV-2 phenotypes: results from the IMPACC study. Nat Commun. 2024;15(1): 216-5. doi: 10.1038/s41467-023-44090-5.
- Haslund-Gourley B, et al. (**Triplett TA** and other members of the IMPACC study group). IgM N-glycosylation correlates with COVID-19 severity and rate of complement deposition. Nat Commun. 2024;15(1):404-0. doi: 10.1038/s41467-023-44211-0.

PHARMACEUTICAL SCIENCES

- Rahman, Md. Shafikur; **Hadi Esfahani, Shiva; Zhang, Yong;** Baez, **Andrew; Abbruscato, Thomas;** Karamyan, Vardan; Trippier, Paul, Imidazole-Based Amide Bioisosteres Yield Activators of Endopeptidase Neurolysin with Enhanced Potency and Metabolic Stability. ACS Med Chem Lett. Mar 29;15(4):510-517, 2024.
- **Sejal Sharma Yong Zhang, Dhavalkumar Patel, Khondker Ayesha Akter, Ali Ehsan Sifat, Sounak Bagchi, Ehsan Nozohourri, Yeseul Ahn,** Vardan T. Karamyan, **Ulrich Bickel, Thomas Abbruscato,** Evaluation of Brain Pharmacokinetic Parameters for Metformin using Intravenous Bolus Administration: Repurposing a Potential Neurotherapeutic for Age-related Neurodegenerative Diseases and Ischemic Stroke. J Pharmacol Exp Ther. May 22;JPET-AR-2024-002152. doi: 10.1124/jpet.124.002152, 2024.
****Selected for an Editorial Viewpoint
- **Akter, KA, Sharma, S, Sifat, AE, Zhang, Y, Abbruscato, TJ;** Metformin ameliorates neuroinflammatory environment for neurons and astrocytes during in vitro and in vivo stroke and tobacco smoke chemical exposure: Role of Nrf2 activation. Redox Biology, Jul 10;75:103266, 2024
- **Ehsan Nozohouri, Yeseul Ahn, Sumaih Zoubi, Dhavalkumar Patel, Sabrina Rahman Archie, Khondker Ayesha Akter,** Muhammad Bilal Siddique, Juyang Huang, **Thomas J. Abbruscato, Ulrich Bickel,** The Acute Impact of Propofol on Blood-Brain Barrier Integrity in Mice. Pharm. Res. Jul 24. doi: 10.1007/s11095-024-03735-w 2024.
- **Smith QR,** Mandula H, Parepally JMR, Oki J, Thomas F, **Thorsheim HR, Al-Ahmad AJ, Abbruscato TJ,** Ask P, Hage DS, Robinson PJ. Brain endothelial permeability, transport, and flow assessed over 10 orders of magnitude using the in situ brain perfusion technique. Fluids Barriers CNS. 2024 Dec 17;21(1):100. doi: 10.1186/s12987-024-00584-y. PMID: 39690422.
- Goldsmith R, **Aburahma A,** Sprague JE. Dopamine Concentration Changes Associated with the Retrodialysis of Methylone and 3,4-Methylenedioxypyrovalerone (MDPV) into the Caudate Putamen. Brain Sciences. 2024; 14(3):265. <https://doi.org/10.3390/brainsci14030265>
- **Heba Ewida, Harrison Benson, Syed Tareq,** and **Mahmoud Salama Ahmed.** Molecular Targets and Small Molecules Modulating Acetyl Coenzyme A in Physiology and Diseases. ACS Pharmacology & Translational Science Article ASAP. DOI: 10.1021/acsptsci.4c00476.
- Ghada ME Ali, Menna A Ewida, Amira M Elmetwali, **Heba A Ewida,** Riham F George, Walaa R Mahmoud, Nasser SM Ismail, **Mahmoud S Ahmed,** Hanan H Georgey. Discovery of pyrazole-based analogs as CDK2 inhibitors with apoptotic-inducing activity: design, synthesis and molecular dynamics study. RSC Advances, 14, 34537-34555, 2024
- **Hebatollah Ewida, Sumaih Zoubi,** Raja R. Kallem, **Dhaval Patel,** Souvik Patra, Luke Szweda, Prasanth K. Chelikani and **Mahmoud Salama Ahmed** "Structure-Based Drug Repurposing

Targeting Malonyl-CoA Decarboxylase for Treatment of Obesity” JPET, 389 (S3) 282, June 2024.

- **Mahmoud Salama Ahmed**, Ngoc Uyen Nhi Nguyen, Yuji Nakada, Ching-Cheng Hsu, Ayman Farag, Nicholas T Lam, Ping Wang, Suwannee Thet, Ivan Menendez-Montes, Waleed M Elhelaly, Xi Lou, Ilaria Secco, Mateusz Tomczyk, Lorena Zentilin, Jimin Pei, Miao Cui, Matthieu Dos Santos, Xiaoye Liu, Yan Liu, David Zaha, Gregory Walcott, Diana R Tomchick, Chao Xing, Cheng Cheng Zhang, Nick V Grishin, Mauro Giacca, Jianyi Zhang, Hesham A Sadek “Identification of FDA-Approved Drugs That Induce Heart Regeneration in Mammals” Nat Cardiovasc Res. 3, 372–388, 2024.
- **Mehta, Y, Patel, D, Pervaiz, I, Bickel, U** and **Al-Ahmad, AJ** (2025). “Targeted proteomics for absolute quantification of glucose transporter 1 in mammalian brain cells using liquid chromatography-mass spectrometry.” Journal of Chromatography Open 7: 100198. <https://doi.org/https://doi.org/10.1016/j.jcoa.2024.100198>. PMID
- **Ahn, Y**, Patil, CD, **Nozohouri, E, Zoubi, S, Patel, D** and **Bickel, U** (2024). “Higher Brain Uptake of Gentamicin and Ceftazidime under Isoflurane Anesthesia Compared to Ketamine/ Xylazine.” Pharmaceutics 16(1)
- Diab, H, Fuquay, T, Datta, P, **Bickel, U**, Thompson, J and Krutsch, K (2024). “Subcutaneous Semaglutide during Breastfeeding: Infant Safety Regarding Drug Transfer into Human Milk.” Nutrients 16(17). <https://doi.org/10.3390/nu16172886>. PMID 39275201; 20240828
- **Miah, MK, Bickel, U** and Mehvar, R (2024). “Bile duct ligation-induced cirrhosis does not alter the blood-brain barrier permeability to sucrose in rats.” Metab Brain Dis 40(1): 53. <https://doi.org/10.1007/s11011-024-01486-6>. PMID 39636464; 20241205
- **Sajib MS**, Zahra FT, Lamprou M, Akwii RG, Park JH, Osorio M, Tullar P, Doci CL, Zhang C, Huveneers S, Van Buul JD, **Wang MH, Markiewski MM, Srivastava SK**, Zheng Y, Gutkind JS, Hu J, **Bickel U**, Maeda DY, Zebala JA, Lionakis MS, Trasti S, Mikelis CM. Tumor-induced endothelial RhoA activation mediates tumor cell transendothelial migration and metastasis. bioRxiv. 2024 Sep 24;. doi: 10.1101/2024.09.22.614304. PubMed PMID: 39372784; PubMed Central PMCID: PMC11451620.
- **Sivaramakrishna Koganti, Kaci Bohn, Alejandra Fernandez, Sami Nazzal, Russell Snyder**. Practice Makes Perfect: Web-based Software Automates Student Calculations Practice and Reduces Faculty Workload. American Journal of Pharmaceutical Education. Volume 88, Issue 9100925 September 2024
- **Sivaramakrishna Koganti, Sami Nazzal, Kaci Bohn, Alejandra Fernandez, Russell Snyder**. The Intersection of Pharmacokinetics and Computer Programming: Designing Software for Calculations in Pharmaceutical Education. Volume 88, Issue 9100926 September 2024.
- **Hansda SŞ, Prateeksha PŞ**, and **Das H**. Kruppel-like factor 2 (KLF2), a potential target for

neuroregeneration. *Neural Regeneration Research*, 2024. 19 (11); 2327-2328, doi: 10.4103/NRR.NRR-D-23-01758.

- **Howlader MSIŞ, Prateeksha PŞ, Hansda SŞ, Naidu P**, Das M, **Barthels D**, and **Das H**. Secretory products of DPSC mitigate inflammatory effects in microglial cells by targeting MAPK pathway. *Biomedicine & Pharmacotherapy*. 2024;170; 115971. <https://doi.org/10.1016/j.biopha.2023.115971>.
- **Bandy, R.; Shahi, S.; Quagraine, N.; Shahbazi Nia, S.; Howlader, Md. S. I.; Srivenugopal, K.**; Stephan, C.; **Das, H.**; Mikelis, C.; **German, N.A.**, The Mechanistic Aspects of Biphenyl Urea-Based Analogues in Triple-Negative Breast Cancer Cell Lines, *ACS Pharmacology & Translational Science*, 2024, 7,1, 12-136. PMID: 38230276.
- Galal, Kareem A., **et al.** “Guanidine-to-piperidine switch affords high affinity small molecule NPFF ligands with preference for NPFF1-R and NPFF2-R subtypes.” *European Journal of Medicinal Chemistry* 269 (2024): 116330.
- **Shahbazi, N.S.; Ortiz, Y.; Zuarth-Gonzalez, J.; Shamir, L.; Frimpong-Manson, K.; Hossain, M.A.; Shahi, S.; Bandy, R.; Bhat, A.; Patel, D.**; Diab, H.; Thompson, J.; **McMahon, L.; Wilkerson, J.; German, N.A.** Characterization of a non-selective opioid receptor functional antagonist – implications for development as a novel opioid dependence medication. *ACS Pharmacology & Translational Science*, 2024, 7, 3, 654-666. PMID: 38481688.
- **Nia, S.S.; Ortiz, Y.T.; Zuarth-Gonzalez, J.; Shamir, L.; Frimpong-Manson, K.; Hossain, M.A.; Shahi, S.; Bandy, R.; Bhat, A.; Patel, D.**; Diab, H.; Thompson, J.; **McMahon, L.; Wilkerson, J.L.**; & **German, N.** (2024) Characterization of a non-selective opioid receptor functional antagonist –implications for development as a novel opioid dependence medication. *ACS Pharmacol. Transl. Sci.* 7:3, 654–666. DOI: 10.1021/acsptsci.3c00262
- Christine M. Formea PharmD, MHI, BCPS, FACC, FASHP, Paldeep Atwal MD, MBA, Kathryn Meintsma MS, JD, Martin Dawes MBBS, MD, Gary Marchant PhD, JD, Ben L. Kong PharmD, **J. Shawn Jones PhD, MS**, Sara L. Rogers PharmD. “STRIPE Partners in Precision Medicine Series: Provider Perspective” *The Pharmacogenomics Journal* (2024) 24:28; <https://doi.org/10.1038/s41397-024-00348-9>.
- Ben L Kong, Roseann S. Gammal, Amina Abubakar, Mark H. Dunnenberger, **J. Shawn Jones**, Sara L. Rogers, David Kisor. “STRIPE Partners in Precision Medicine Series: Pharmacist Perspective” *The Pharmacogenomics Journal* (2024) 24:26; <https://doi.org/10.1038/s41397-024-00347-w>.
- Sara L. Rogers, **J. Shawn Jones**, Ben L. Kong, Christine M. Formea, Jacob Awkal, Benjamin G. Brown. “A Collaborative Force for Precision Medicine Progress: The STRIPE pharmacogenomics conference series” *The Pharmacogenomics Journal* (2024) 24:27; <https://doi.org/10.1038/s41397-024-00345-y>.

- **McMahon, L. R., Obeng, S.,** McCurdy, C. R., Barrett, J. E., & Kim, F. J. (2024). Drug Discovery, Development, and Regulation. Brody's Human Pharmacology-E-Book: Brody's Human Pharmacology-E-Book, 49.
- **Obeng, Samuel, Lance R. McMahon,** and Edward Ofori. "Patent Review of Novel Biologics Targeting Opioid Use Disorder (2018–2024)." ACS Chemical Neuroscience (2024).
- **Zuarth Gonzalez, J.D.;** Mottinelli, M.; McCurdy, C.R.; de Lartigue, G.; **McMahon, L.R.;** & **Wilkerson, J.L.** (2024) Mitragynine and morphine produce dose-dependent bimodal action on food but not water intake in rats. Am J Physiol Regul Integr Comp Physiol. 2024 Dec 1;327(6):R568-R579. doi: 10.1152/ajpregu.00128.2024. Epub 2024 Sep 9. PMID: 39250542.
- **Ortiz, Y.T.; Shamir, L.G.; McMahon, L.R.;** & **Wilkerson, J.L.** (2024) Characterization of commercially available murine fibrosarcoma NCTC-2472 cells both in vitro and as a model of bone cancer pain in vivo. PLoS One. 2024 Aug 29;19(8):e0309398. doi: 10.1371/journal.pone.0309398. PMID: 39208033; PMCID: PMC11361427.
- **Frimpong-Manson, K.; Ortiz, Y.T.; McMahon, L.R.;** & **Wilkerson, J.L.** (2024) Advances in Understanding Migraine Pathophysiology: A Bench to Bedside Review of Research Insights and Therapeutics. Frontiers in Molecular Neuroscience 17: <https://doi.org/10.3389/fnmol.2024.1355281>
- **Obeng, S.;** Crowley, M.L.; Mottinelli, M.; León, F.; **Zuarth Gonzalez, J.D.;** Chen, Y.; Gamez-Jimenez, L.R.; Restrepo, L.F.; Ho, N.P.; Patel, A.; Martins Rocha, J.; Alvarez, M.A.; Thadisetti, A.M.; Park, C.R.; Pallares, V.L.C.; Milner, M.J.; Canal, C.E.; Hampson, A.J.; McCurdy, C.R.; **McMahon, L.R.;** **Wilkerson, J.L.** & Hiranita, T. (2024) The Mitragyna speciosa (kratom) alkaloid mitragynine: Analysis of adrenergic α_2 receptor activity in vitro and in vivo. Eur J Pharmacol. 2024 Oct 5; 980:176863. doi: 10.1016/j.ejphar.2024.176863. Epub 2024 Jul 26. PMID: 39068978.
- **Wilkerson, J.L.** (2024) Seeing through the Haze: Monoacylglycerol Lipase Inhibitors As Analgesics. J Pharmacol Exp Ther. 2024 Aug 19;390(3):288-290. doi:10.1124/jpet.124.002132. PMID: 39159976.

PHARMACY PRACTICE

- Bohn K, Aburahma A, Fernandez A, Selby AR. Artificial intelligence in the pharmacy classroom: our future is in good hands. Tx Pharm. 2024;10(2):33-34
- Zhang S, Sidra F, **Alvarez CA,** Kinaan M, Lingvay I, Mansi IA. Healthcare utilization, mortality, and cardiovascular events following GLP1-RA initiation in chronic kidney disease. Nat Commun. 2024;15(1):10623. Published 2024 Dec 5. doi:10.1038/s41467-024-54009-3

- **Van Dyke A**, Cline K, Morley S, Munusamy S, Mnatzaganian C, Thurston M. Prioritizing Faculty Well-Being: Why it Matters, What Schools Can Do, and a Call for Action. *Am J Pharm Edu*. 2024 November; 88(11). doi: <https://doi.org/10.1016/j.ajpe.2024.101286>
- **Alvarez CA**, Hall RG 2nd, Lin S, Perkins AR, Mortensen EM. Impact of PCV13 and PPSV23 Vaccination on Invasive Pneumococcal Disease in Adults with Treated Rheumatoid Arthritis: A Population-Based Study. *Microorganisms*. 2024 Oct 16;12(10):2073. doi: 10.3390/microorganisms12102073. PMID: 39458381; PMCID: PMC11510061.
- Johnson EG, Maki Ortiz K, Adams DT, Kaur S, Faust AC, Yang H, **Alvarez CA**, **Hall RG** 2nd. A Retrospective Analysis of Intravenous Push versus Extended Infusion Meropenem in Critically Ill Patients. *Antibiotics*. 2024; 13(9):835. <https://doi.org/10.3390/antibiotics13090835>
- Shah R, Kong A, De Melo S, Boktor M, Henriquez R, Mandalia A, Samant H, **Alvarez CA**, Mansi IA. Association of statins with nonalcoholic fatty liver disease in patients with diabetes. *J Investig Med*. 2024 May 15:10815589241248076. doi: 10.1177/10815589241248076. Epub ahead of print. PMID: 38594224
- Basri A, **Sigler MA**, Kelly KC, Lopez DH, **Alvarez CA**. Effect of pregabalin initiation on diuretic requirements in patients with chronic heart failure. *J Am Pharm Assoc* (2003). 2024 May-Jun;64(3):102063. doi: 10.1016/j.japh.2024.102063. Epub 2024 Mar 2. PMID: 38432480.
- Paulmann R, Stouffer R, **Mathys M**, Weideman R, **Alvarez CA**, Yang H. Cardiovascular Safety of Amphetamine/Dextroamphetamine versus Methylphenidate in Older Adults. *Journal of Pharmacy Practice*. 2024;37(5): 116-1120. doi:10.1177/08971900241229111
- Ebrahimi R, Dennis PA, **Alvarez CA**, Shroyer AL, Beckham JC, Sumner JA. Posttraumatic Stress Disorder Is Associated With Elevated Risk of Incident Stroke and Transient Ischemic Attack in Women Veterans. *J Am Heart Assoc*. 2024;13(5):e033032. doi:10.1161/JAHA.123.033032
- **Alvarez CA**, **Hall RG** 2nd, Lin S, Perkins AR, Mortensen EM. Compliance with recommended pneumococcal vaccination schedule in patients treated for rheumatoid arthritis: A retrospective cohort study in the Veterans Affairs population. *Vaccine*. Published online January 3, 2024. doi:10.1016/j.vaccine.2023.12.075
- Ebrahimi R, Dennis P, Shroyer A, Tseng C, **Alvarez CA**, Beckham JC, Sumner JA. Pathways Linking Posttraumatic Stress Disorder to Incident Ischemic Heart Disease in Women: Call to Action. *JACC Adv*. 2024 Jan, 3 (1) <https://doi.org/10.1016/j.jacadv.2023.100744>
- **La-Beck NM**, Lee YR, Patel J, Yang H, Stout M, Kologey A, Ruesewald A, **Alvarez CA**. Clinical Characteristics and Patterns of Immune Responses in COVID-19 Patients From a Rural Community Hospital. *Cureus*. 2024 Jun 3;16(6):e61600. doi: 10.7759/cureus.61600. PMID: 38962589; PMCID: PMC11221625

- **Ranee Basse, Shawhart J, Notturmo-Strong D, Jacob G, Campbell L, Coomer T, Lenz R.** Fostering Appropriate Consumer Medication Disposal US Pharm. 2024;49(12):14-18. <https://www.uspharmacist.com/article/fostering-appropriate-consumer-medication-disposal>
- **Chelsea Krueger, Bainum TB, Krueger CK,** Hawkins WA. Cultivating expert thinking skills for experiential pharmacy trainees. Am J Health Syst Pharm 2024: zxae366. doi:10.1093/ajhp/zxae366. Online ahead of print.
- Nieto K, **Basinger R,** Young R, Naguib T, **MacLaughlin E.** Influence of patient characteristics on provider deviation from guideline-directed medical therapy of heart failure with reduced ejection fraction in primary care clinics. WTJOM. 2024;2(1). Accessed March 7, 2025. <https://westtexasjom.org/index.php/wtjm/article/view/30>
- Nieto KE, **Basinger R,** Young RB, Naguib TH, **MacLaughlin EJ.** Influence of patient characteristics on deviation from guideline-directed medical therapy of heart failure with reduced ejection fraction in primary care clinics. West Texas J Med. 2024;2(1):13-22.
- Batson C, Arawiran J, Parat S, Luedtke S. Drug use evaluation of prednisone use in later preterm and term infants with persistent oxygen requirements. J Pediatr Pharmacol Ther, submitted.
- Campbell LS[^], Huseman K, Krutsch K, Datta P. Minimal transfer of atorvastatin and its metabolites in human milk: a case series. Breastfeed Med. 2024. 1-5. doi: 10.1089/bfm.2024.0258. IF 2.7.
- Krutsch K, Campbell LS[^], Baker T, Datta P. Alleviating anxiety while breastfeeding: evaluating buspirone transfer into human milk. Arch Womens Ment Health. 2024. 1-5. doi: 10.1007/s00737-024-01445-1. IF 3.2.
- **Jaramillo J, Notturmo-Strong D, Jacob GK, Campbell LS, Coomer TN, Lenz RJ.** Fostering appropriate consumer medication disposal. US Pharm. 2024;49(12):14-18. Accessed December 17, 2024. Online.12/2024. IF 0.3.
- **Jaramillo J, Notturmo-Strong D, Jacob GK, Campbell LS, Coomer TN, Lenz RJ.** Fostering appropriate consumer medication disposal. US Pharm. 2024;49(12):14-18.
- Kauffman RP, MacLaughlin EJ, Courtney LA, Vineyard DD. An Ethical Assessment of Compounded Bioidentical Hormone Therapy. Climacteric. 2024 Jun;27(3):326-328. [Impact factor = 2.9]
- Kauffman RP, MacLaughlin EJ, Courtney LA, Vineyard DD. Fear, misinformation, and pharmaceutical messianism in the promotion of compounded bioidentical hormone therapy. Front Reprod Health. 2024 Feb 29;6:1378644. [Impact factor = 2.3]
- Kauffman RP, MacLaughlin EJ, Courtney L, Vineyard D. Perspective: fear, misinformation, and pharmaceutical messianism in the promotion of compounded bioidentical hormone therapy.

- Klein MS, Eddy E, Courtney L, MacLaughlin E. Techs as Teachers: A Decade's Experience Utilizing Pharmacy Technicians in a Doctor of Pharmacy Program.
- **Nakia Duncan** National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology: Antiemesis (Version 9.2024). https://www.nccn.org/login?ReturnURL=https://www.nccn.org/professionals/physician_gls/pdf/antiemesis.pdf
- Eddy, E., Ballou, J., Finke, J., et al. Medication Therapy Management: The evolution of clinical pharmacy services in U.S. Community-based Pharmacy Practice – An opinion of the communitybased practice and research network of the American College of Clinical Pharmacy. J Am Coll Clin Pharm. 2024;1-7. Doi:10.1002/jac5.2047
- **Klein MS, Eddy E, Courtney L, MacLaughlin E.** Techs as Teachers: A Decade's Experience Utilizing Pharmacy Technicians in a Doctor of Pharmacy Program. Am J Pharm Edu. E-pub ahead of print 3 May 2024. doi: 10.1016/j.ajpe.2024.100703
- Bowers R, Hughes JA, Stover K, Strachan D, Edwards KL, Dipenbrock A, Harris JB, Rajagopalan V, Thigpen J, Parmer, J, Truong HA, Koerner P, Orr-Skivin JA, Oliveria M. The role of consumerism in pharmacy education. Am J Pharm Educ. 2024;88(6):100708. doi.org/10.1016/j.ajpe.2024.100708
- Stamm PL, Haines ST, Edwards KL, Fusco NM, Havrda D, Lee KC, Papke JL, Rhoney D, Sturpe DA, Knowles G, Baggett R. Educational outcomes necessary to enter pharmacy residency training: 2023 update. J Am Coll Clin Pharm. 2024;*(**):1-5. doi: <https://doi.org/10.1002/jac5.1994>
- **Irons B.** Endocrine and Metabolic Disorders. In: Beckett RD, Bente JA, Bondi DS, et al., eds. Updates in Therapeutics: Pharmacotherapy Preparatory Review and Recertification Course, 2024 ed. Lenexa, KS: American College of Clinical Pharmacy, 2024
- Hughes J, White A, **Kuo GM**, Parmar J, Fuentes D. Leveraging collective expertise, wisdom, and guidance through mastermind teams. Am J Pharm Educ. 2025 Jan; 89(1): 101345. DOI: <https://doi.org/10.1016/j.ajpe.2024.101345>. PMID: 39662598.
- **Mahan RJ.** Dementias. In: Sanowski CA and Witt DM (Eds). PSAP Pharmacotherapy Self-Assessment Program: Neurology and Chronic Conditions. 2024(3):35-49. American College of Clinical Pharmacy.
- Mathys M. Management of Insomnia in Older Adults: A Case Study. American Pharmacists Association; 2024. Available from: https://learn.pharmacist.com/learn/courses/6371/bcgp-recert-management-of-insomniain-older-adults-a-casestudy?_gl=1*1n48o9c*_gcl_

au*MjA5MzUwOTYxOC4xNzI2Njg5OTA0*_ga*NjIwMzE3MTMzLjE3MTI2ODc5NDY.*_ga_8FD2YTJG6Y*MTcyNjY4OTkwMy4yLjEuMTcyNjY4OTk4Ny4wLjAuMA.

- **Minze MG**. Endocrine and Metabolic Disorders. In: Boylan PM, Crannage E, Durham SH, et al. eds. Ambulatory Care Pharmacy Preparatory Review and Recertification Course, 2024 ed. Lenexa, KS: American College of Clinical Pharmacy, 2024:505-572.
- Martello JL, Dumont Z, Bruck W, Buckley MS, Buckley CT, Centanni N, Chester EA, Gonzales J, Harper G, Howland M, Gutenschwager D, Langham K, Meyers R, Roberts RJ, Selby AR, Shin E, Szempruch K, Van Dril E, Wu S. Identifying ideal pharmacist to patient ratios for the successful provision of clinical pharmacy services. J Am Coll Clin Pharm. 2024;7(5):505-16.
- Denison TL, Sorensen KU, Blanton MP, Johnson L, Byrd T, Pass SE, Philips L, Miller J, McMahon LR, Cherry B. Quality Improvement Review Board: An Innovative Approach to Oversight of Projects That Do Not Meet Criteria of Human Subject Research. Qual Manag Health Care 2024;33(4):269-277. DOI: 10.1097/QMH.0000000000000446
- Litten K, Howard M, Beck T, Abu-Baker A, Ochoa P, Torres BP, Wanat M, Pass S. New Graduate Workforce Readiness from Hospital Hiring Manager Perspectives. TJHP 2024;22(1):6-12.
- **Zhong C**. Revolutionizing pharmacy practice with digital twins: a digital guardian angel. Tx Pharm. 2024;10(2):30-32.”

NON-PEER REVIEWED PUBLICATIONS

- **Kaci Bohn, Amal Aburahma, Alejandra Fernandez, Ashley Selby**. “Artificial Intelligence (AI) in the Pharmacy Classroom: Our Future is in Good Hands.”Tx Pharm. 2024;10(2):33-34.
- Kauffman RP, **MacLaughlin EJ, Courtney L**, Vineyard D. An ethical assessment of compounded bioidentical hormone therapy. Climateric. Published online January 30, 2024. doi:10.1080/13697137.2024.2306272
- **Klein, M., Eddy, E., Courtney, L., MacLaughlin, E.** (2024). Techs as Teachers: A Decade’s Experience Utilizing Pharmacy Technicians in a Doctor of Pharmacy Program. American Journal of Pharmacy Education. <https://doi.org/10.1016/j.ajpe.2024.100703>
- **Klein MS, Eddy EG, Courtney LA, MacLaughlin EJ**. Techs as Teachers: A Decade’s Experience Utilizing Pharmacy Technicians in a Doctor of Pharmacy Program. Am J Pharm Educ. 2024 Jun;88(6):100703. [Impact factor = 3.3]
- **Klein MS, Eddy EG, Courtney LA, MacLaughlin EJ**. Techs as teachers: a decade’s experience utilizing pharmacy technicians in a doctor of pharmacy program. Am J Pharm Educ. 2024;88(6):Article 100703. doi.org/10.1016/j.ajpe.2024.100703

- Shahab, M., **Eddy, E.**, “Breaking Through: Advancements in the RSV Vaccine” ACCP Community-based PRN newsletter, January 2024
- **Edwards KL**, Bottenberg MM, Hughes H, Fuentes D. Adopting a freudenfreude mindset in your leadership approach. J High Educ M. Accepted June 2024 (publishing pending in Feb 2025)
- **Reeb O, Gorczyca H. Higbea AM**[^]. Orforglipron - New Oral GLP-1 Agonist. TSHP Newsletter. Accepted Mar 2024.
- **Klein MS**. APhA House of Delegates debates AI use in pharmacy practice. Texas Pharmacy Magazine. 2024;10(2):25.
- **Chelsea Krueger** SCCM Clinical Pharmacy and Pharmacology Section Pharmacotherapy Literature Update Jan 2024: Methylene Blue Reduces Mortality in Critically Ill and Perioperative Patients: A Meta-Analysis of Randomized Trials May 2024, Hydrocortisone plus fludrocortisone for community acquired pneumonia-related septic shock: a subgroup analysis of the APROCCHSS phase 3 randomised trial”
- Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL); 23rd Annual Report to the Secretary of Health and Human Services and the U.S. Congress. Emerging trends in health care training: Artificial intelligence, addiction medicine, behavioral health, and professional preparedness. 2024. [Report; **Kuo GM** served as Chair of ACICBL]
- **MacLaughlin EJ**, Saseen JJ. It’s about blood pressure reduction and control. Am J Hypertens. Published online ahead of print March 6, 2024. doi:10.1093/ajh/hpae023
- **Mathys M**^{*}. Management of Insomnia in Older Adults: A Case Study. American Pharmacists Association; 2024. Available from: https://learn.pharmacist.com/learn/courses/6371/bcgp-recert-management-of-insomniain-older-adults-a-casestudy?_gl=1*1n48o9c*_gcl_au*MjA5MzUwOTYxOC4xNzI2Njg5OTA0*_ga*NjIMzE3MTMzMzLjE3MTI2ODc5NDY.*_ga_8FD2YTJG6Y*MTcyNjY4OTkwMy4yLjEuMTcyNjY4OTk4Ny4wLjAuMA.
- **Rebecca Sleeper**: Fundamentals of Geriatric Pharmacotherapy, 3rd edition. ASHP publishing. Officially launched preparation for 3rd edition in August 2023. The bulk of activity associated with this project was in 2024. First drafts were due May 31, 2024 are 1st drafts of all chapters, with review and final drafts due July 1, 2024. After completing work associated with author extensions, editorial phase was complete by Fall 2024, and all chapters are now with the copy editor at the galleys / production stage. In addition to co-editor role, I personally authored one chapter and co-authored two chapters. Market release is anticipated Spring 2025. The book continues to be sold internationally and cited as a resource by the ASCP Geriatrics Curriculum guide. It has also been adopted by both physician and nursing orgs as a Geriatrics resource.
- **Burnam L., Parker T.**, Optimal Insulin Dose Reduction at a Pediatric Diabetes Camp: A Retrospective Observational Cohort. Poster

PATENTS

- **Abbruscato, Karamyan**, Trippier, Texas Tech University System and Board of Regents of the University of Nebraska “Small Molecule Activators of Neurolysin as a Novel Treatment Approach for Ischemic Stroke” was officially published, U.S. patent No. PCT/US2024/028857, November 2024.
- **Abbruscato, German, Hossain**, Neugebauer, “Novel selective and non-selective opioid receptor functional antagonists and methods related thereto for treatment of addiction, opioid dependence, and neuropathic pain” U.S. Patent Appl. US 18/420,655, 2024.
- **Mahmoud Salama Ahmed, Heba Ewida, Harrison Benson, Syed Tareq, Jenny Wilkerson**. Composition and Thereof of Pan EphB tyrosine kinase forward signaling inhibitors in EphB-associated diseases. U.S. Provisional Pat. App. No. 63/684,938
- **Das H** and Das BC. Pharmacological Agonist of KLF2 Reduces Osteoclast Differentiation, Inflammation, and Covid. Application # PCT/US24/53120. Date 10 25 2024.

BOOK CHAPTERS

- Peron E, **Clifford KM. Van Dyke A**. Endocrinology. In: Hughes G, Antimisiaris D, eds. Polypharmacy, Appropriate Prescribing, and Deprescribing: A Clinician’s Guide, 1e. Elsevier. Manuscript submitted Aug 2024. Under review
- Peron E, **Clifford KM. Van Dyke A**. Endocrinology, In: Hughes GM, Antimisiaris DE. Polypharmacy, Appropriate Prescribing, and Deprescribing: A Clinician’s Guide. 1st ed. Elsevier. [Awaiting publication]
- **Barthels D, Prateeksha P, and Das H**. Human stem cells and their future application in neurodegenerative diseases. Comprehensive Hematology and Stem Cell Research. Elsevier Publication, 2024 Chapter 4.22, pages 316-324. <http://doi.org/10.1016/B978-0-443-15717-2.00073-1>. ISBN: 978-0-443-15718-9.
- Co-Series Editor **Irons BK**, Meredith AH, eds. Ambulatory Care Self-Assessment Program, 2024 Book 3. Nephrology and Dermatology Care. Lenexa, KS: American College of Clinical Pharmacy, 2024
- Co-Series Editor **Irons BK**, Meredith AH, eds. Ambulatory Care Self-Assessment Program, 2024 Book 2. Women’s and Men’s Health. Lenexa, KS: American College of Clinical Pharmacy, 2024
- Co-Series Editor **Irons BK**, Meredith AH, eds. Ambulatory Care Self-Assessment Program, 2023 Book 1. Endocrinology Care. Lenexa, KS: American College of Clinical Pharmacy, 2024

- **Kuo GM**, Trinkley KE, and Bacci JL. American College of Clinical Pharmacy Ambulatory Care Pharmacist's Survival Guide: Scholarship in clinical practice. 2024.
- **Van Dyke A, Lacey C**. Nonpharmacologic Interventions for the Management of Diabetes. In: Vijayan A, ed. The Pharmacist's Pocket Guide for Diabetes and Obesity. Springer Nature. Final submission Sep 2024. Under review
- **Eric MacLaughlin** DiPiro book chapter
- **Eric MacLaughlin** DiPiro book chapter
- **Mahan RJ**. Dementias. In: Sanowski CA and Witt DM (Eds). PSAP Pharmacotherapy Self-Assessment Program: Neurology and Chronic Conditions. 2024(3):35-49. American College of Clinical Pharmacy
- **Minze MG**. Endocrine and Metabolic Disorders. In: Boylan PM, Crannage E, Durham SH, et al. eds. Ambulatory Care Pharmacy Preparatory Review and Recertification Course, 2024 ed. Lenexa, KS: American College of Clinical Pharmacy, 2024:505-572"
- **Rebecca Sleeper**: Fundamentals of Geriatric Pharmacotherapy, 3rd edition. ASHP publishing. Officially launched preparation for 3rd edition in August 2023. The bulk of activity associated with this project was in 2024. First drafts were due May 31, 2024 are 1st drafts of all chapters, with review and final drafts due July 1, 2024. After completing work associated with author extensions, editorial phase was complete by Fall 2024, and all chapters are now with the copy editor at the galley / production stage. In addition to co-editor role, I personally authored one chapter and co-authored two chapters. Market release is anticipated Spring 2025. The book continues to be sold internationally and cited as a resource by the ASCP Geriatrics Curriculum guide. It has also been adopted by both physician and nursing orgs as a Geriatrics resource.
- **Zhong C**, DiVall M, Wolley A. Acute Care Handbook for Physical Therapists, 6e: Chapter 19.

ABSTRACTS

- Villalba H, **Archie SR, Nozohouri S, Sifat AE, Sharma S**, Vaidya B, **Abbruscato TJ**, Sex differences in C57BL/6J mice ischemic stroke outcomes after short exposure to tobacco smoke. Advancing the Study of Stroke in Women Through the Integration of Basic, Clinical and Socioeconomic Perspectives, NINDS Workshop, Arlington, VA, April 2024.
- **Khondker Ayesha Akter, Sejal Sharma, Sejal Rajesh Jadhav, Thomas J Abbruscato**, Evaluation of the blood-brain barrier protective effects of metformin after mixed exposures to cigarette smoke, e-cigarette vapor, and stroke conditions. AAPS PharmSci 360 meeting, Salt Lake City, UT. October 2024

- **Yong Zhang, Sejal Rajesh Jadhav, Sejal Sharma, Khondker Ayesha Akter**, Paul C Trippier, Vardan T Karamyan, **Thomas J Abbruscato** A new neurolysin activator ameliorates brain injury in ischemic stroke mice AAPs PharmSci 360 meeting, Salt Lake City, UT. October 2024
- **Hebatollah Ewida, Sumaih Zoubi**, Raja R. Kallem, **Dhaval Patel**, Souvik Patra, Luke Szweda, Prasanth K. Chelikani and **Mahmoud Salama Ahmed** “Structure-Based Drug Repurposing Targeting Malonyl-CoA Decarboxylase for Treatment of Obesity” JPET, 389 (S3) 282, June 2024.
- Ebrahimi R, Dennis P, **Alvarez CA**, Beckham J, Shroyer A, Sumner J. Abstract 4140852: Total Burden of Posttraumatic Stress Disorder on Incident Cardiovascular Disease Among Women Veterans. *Circulation*. 2024;150(Suppl_1):A4140852- A4140852. doi:doi:10.1161/circ.150.suppl_1.4140852
- Ebrahimi R, **Alvarez CA**, Dennis P. Abstract 4139226: Anticoagulation For Patients On Hemodialysis And Atrial Fibrillation. *Circulation*. 2024;150(Suppl_1):A4139226- A4139226. doi:doi:10.1161/circ.150.suppl_1.4139226
- **Gorczyca H, Alvarez CA, Vu C, Hall RG** 2nd. Incidence of Acute Kidney Injury with Imipenem-Cilastatin vs. Meropenem in Patients with Pneumonia Bacteremia, and/or Sepsis: A Retrospective, Cohort Study. American College of Clinical Pharmacy Annual Meeting, Phoenix, AZ, 10/24.
- Mascarenhas J, Perkins AR, Shih YH, Tang D, Vergara S, **Alvarez CA**. Anemia Burden in Patients With Myelofibrosis (MF) Treated With Ruxolitinib (RUX): Data From the Veterans Affairs Corporate Data Warehouse (VACDW). *Clinical Lymphoma, Myeloma and Leukemia*. 2024; 2: S202.
- Zhang S, Sidra F, **Alvarez CA**, Kinaan M, Lingvay I, Mansi I. 737-P: Acute Healthcare Utilization, Mortality, and Cardiovascular Events following GLP-1-RA Initiation by Patients with Advanced Chronic Kidney Disease—A Real-World Comparative Study. *Diabetes* 14 June 2024; 73 (Supplement_1): 737–P. <https://doi.org/10.2337/db24-737-P>
- **Sigler MA**, Perkins A, Parker R, **Alvarez CA**. Effectiveness of SGLT2 inhibitors in Veterans with type 2 diabetes mellitus and heart failure with a recent heart failure hospitalization. Presented at American College of Clinical Pharmacy Global Annual Meeting 2024. Phoenix, AZ. October 13, 2024.
- **Mahan RJ, Lacey C, Basinger R, Courtney LA, Eddy E**. Student reflections from a selfcare small group simulation activity with standardized patients. AACP Annual Meeting; Boston, MA. July 2024.
- **Mahan, R., Lacey, C., Basinger, R., Courtney, L., Eddy, E.** “Student reflections from a self-care small group simulation activity with standardized patients” presented at AACP 2024 Annual meeting.
- **Mahan RJ, Lacey C, Basinger R, Courtney L, Eddy E**. Student Reflections from a Self-Care Small Group Simulation Activity with Standardized Patients. *American Journal of Pharmaceutical Education*. 2024;88(9):101059.

- **Mahan RJ, Lacey C, Basinger R, Courtney LA, Eddy E.** Student reflections from a self-care small group simulation activity with standardized patients. AACP Annual Meeting; Boston, MA. July 2024.
- **Zoubi, S, Patel, D, Ahn, Y, Nozohouri E, Bickel, U.** High Dose Acetaminophen has no Acute Impact on the Integrity of the Blood-Brain Barrier in Mice. ASPET 2024 Annual Meeting, Arlington VA, May 16-19, 2024.
- **Bohn K, Koganti S, Sleeper RB.** Lessons learned in the development and administration of digital biweekly composite exams for pharmacy students. Poster presented at AACP Annual Meeting, July 21-22, 2024 Boston, MA
- **Kaci Bohn, Sivaramakrishna Koganti, Rebecca Sleeper** “Lessons Learned in the Development and Administration of Digital Biweekly Composite Exams for Pharmacy Students” Accepted at AACP Annual Meeting, Boston, July 2024
- **Sivaramakrishna Koganti, Sami Nazzal, Kaci Bohn, Alejandra Fernandez, Russell Snyder** “The Intersection of Pharmacokinetics and Computer Programming: Designing Software for Calculations in Pharmaceutical Education” Accepted at AACP Annual Meeting, Boston, July 2024
- **Sivaramakrishna Koganti, Alejandra Fernandez, Kaci Bohn, Sami Nazzal, Russell Snyder** “Practice Makes Perfect: Web-based Software Automates Student Calculations Practice and Reduces Faculty Workload” Accepted at AACP Annual Meeting, Boston, July 2024
- Huseman K, **Campbell LS**, Datta P, Krutsch K. Minimal transfer of atorvastatin and its metabolites in human milk: a comprehensive case report. Amarillo Research Symposium. Abstract. Amarillo, Texas; April 2024.
- DeLellis T, Sadowski CA, Noureldin M, Coe A, Olatunde O, Campbell A, DeLellis T, Nagy M, **Clifford KM**, Sharma M, Freire-Cobo C. State of the academic pharmacy workforce specializing in geriatrics. Annual Meeting of the American Academy of Colleges of Pharmacy. Boston, Massachusetts. July 2024
- Sadowski CA, Noureldin M, Coe A, Olatunde O, Campbell A, DeLellis T, Nagy M, **Clifford KM**, Sharma M, Freire-Cobo C. State of the academic pharmacy workforce specializing in geriatrics. Canadian Pharmacy Education and Research Conference. Quebec City, PQ, Canada. June 2024.
- Amyx S, **Courtney L, Dominguez E**, Lopez ND, McMaster K, **MacLaughlin EJ, Kuo G.** Factors influencing therapeutic inertia and prescribing patterns for GLP-1 agonist medications: a qualitative study using the grounded theory approach. Abst#64807. American College of Clinical Pharmacy Annual Meeting, Virtual Poster Symposium. May 21, 2024
- **Sleeper RB, Duncan N.** Utility of a verbal case presentation exercise as a measure of skills competency. Poster presented at AACP Annual Meeting, July 21-22, 2024 Boston, MA
- **Sleeper R, Duncan NA.** Utility of a Verbal Case Presentation Exercise as a Measure of Skills

Competency. Am J Pharm Educ. 2024; (9) 88: 100911.doi.org/10.1016/j.ajpe.2024.100911

- **Sleeper R, Duncan NA**, Utility of a verbal case presentation exercise as a measure of skills competency. Poster Presentation. AACP Annual Meeting, Boston, MA July 2024
- **Miller J, Musharof A, Anderson D, Agolue J, Selimovic S, Hines A, Klein M, Selby A, Payne K, Edwards K**. Evaluation of student engagement and benefits of interactive sessions in a Student Leadership Retreat. ASHP Midyear Clinical Meeting. December 10, 2024.
- **Miller J, Musharof A, Anderson D, Agolue J, Selimovic S, Hines A, Klein M, Payne K, Edwards KL**. Evaluation of student engagement and benefits of interactive sessions in a student leadership retreat. 2024 ASHP Midyear Clinical Meeting, Las Vegas, NV.*
- **Miller J, Musharof A, Anderson D, Agolue J, Selimovic S, Hines A, Klein MS, Payne K, Edwards KL**. Evaluation of Student Engagement and Benefits of Interactive Sessions in a Student Leadership Retreat. December 2024. Presented at the American Society of Health Systems Pharmacists Midyear Clinical Meeting, New Orleans, LA.
- **Miller J, Musharof A, Anderson D, Agolue J, Selimovic S, Hines A, Klein MS, Payne K, Edwards KL**. Evaluation of Student Engagement and Benefits of Interactive Sessions in a Student Leadership Retreat. December 2024. Presented at the American Society of Health Systems Pharmacists Midyear Clinical Meeting, New Orleans, LA.
- McCoy E, Diaz-Cruz ES, Hess M, Fadda H, Gonyeau MJ, Grindord K, Gumina G, Kahaleh AA, Nagel A, Phillip A, Prudencio J, Sampognaro L, Shealy KM, Strachan DA, Van Amburgh JA, **Edwards, KL**. ALFP Debate: schools/colleges of pharmacy have an obligation to train their students to use artificial intelligence tools for pharmacy practice? American Association of Colleges of Pharmacy Annual Meeting. Boston, MA, July 2024. Am J Pharm. Educ. 2021;88(9):100765. <https://doi.org/10.1016/j.ajpe.2024.100765>
- **Agolue J, Higbea AM[^]**, Speed S. Evaluating the Success of a Pharmacist/Nurse Practitioner-Led Hypertension Clinic Referral Process. Poster presented at: ASHP Midyear; Dec 7-12, 2024; New Orleans, LA
- **Chavez F, Gorczyca H, Higbea AM[^]**, et al. Evaluating the Impact of Interprofessional Patient Education and Understanding of Diabetes at a Student Run Free Clinic (SRFC) for Uninsured Patients. Poster presented at: ASHP Midyear; Dec 7-12, 2024; New Orleans, LA.
- **Henderson T, Grabenhorst C, Higbea AM[^]**, et al. Improving Medication Counseling Effectiveness and Confidence at an Interprofessional Student-Run Free Clinic. Poster presented at: ASHP Midyear; Dec 7-12, 2024; New Orleans, LA
- Jones BG, **Johnson LW, Higbea AM**, et al. Disclosure of Error: A Zoom-Based Interprofessional Simulation for Second-Year Medical Students and Pharmacy Students. Poster presented at:

AAMC SEGA Conference; Apr 11, 2024; Houston, TX.

- Hunziker S, **Klein MS**, Volino L, Sourial M. The impact of personality type on pharmacy students' communication skills. July 2024. Presented at American Association of Colleges of Pharmacy PharmEd 2024, Boston, Massachusetts.
- Hunziker S, **Klein MS**, Volino L, Sourial M. The impact of personality type on pharmacy students' communication skills. July 2024. Presented at American Association of Colleges of Pharmacy PharmEd 2024, Boston, Massachusetts.
- **Selomovic S**, Azad A, **Krueger CK**. Impact of a revised inhaled therapy order set on resource utilization in critically ill patients. Poster presentation at: 2024 ASHP Midyear Clinical Meeting and Exhibition; December 9, 2024; New Orleans, Louisiana.
- **Okpalanwaka IF**, **Daughterity EA**, McCormick AL, **Anderson TS**, Smith SL, Lawrence C, **Lowe DB**. A PD-L1 x CD3 bispecific antibody enhances the anti-tumor efficacy of regorafenib in pre-clinical colon cancer models. AACR Special Conference in Cancer Research: Tumor Immunology and Immunotherapy, Boston, MA, 18-21 Oct. 2024. (Selected for an AACR Scholar-in-Training award)
- **Batson C**, Arawiran J, Parat S, **Luedtke S**. Drug use evaluation of prednisone use in later preterm and term infants with persistent oxygen requirements. TTUHSC Annual Research Days, April 2024.
- **Batson C**, Arawiran J, Parat S, **Luedtke S**. Drug use evaluation of prednisone use in later preterm and term infants with persistent oxygen requirements. 33rd Annual Pediatric Pharmacy Advocacy Meeting, Minneapolis, MN, May 2024.
- **Batson C**, **Luedtke S**. Comparing neonatal outcomes following prenatal antidepressant exposure. ASHP Midyear Clinical Meeting, New Orleans, LA, December 2024.
- DStark HN, Bainum TB, **Hall RG II**, Shaw C, **Haase KK**. Impact of value-based incentive program (VBIP) implementation on critically ill adults with suspected sepsis on hospital-onset *Clostridioides difficile* infection (HO-CDI) rates: an Oracle Real-World Data analysis. Texas Society of Critical Care Medicine Annual Symposium, Houston, Texas. September 2024
- Rodriguez DJ, **Mathys ML**, Weideman RA. Duloxetine for treatment-resistant depression in older adults [abstract]. American Association of Psychiatric Pharmacists Annual Meeting, 2024. *Ment Health Clin* 2024;14(2):143.
- Litten K, Howard M, Beck T, Abu-Baker A, Ochoa P, Torres BP, Wanat M, **Pass S**. Are They Ready? New Graduate Workforce Readiness from Hospital Hiring Manager Perspectives. American Association of Colleges of Pharmacy Annual Meeting, Boston, MA. July 2024.
- **McCarty R**, **Zhong C**, **Terrell B**, **Pass S**. Improving Pharmacy Student Education by Integrating Narrative Medicine Assignments. American Society of Health-System Pharmacists Midyear

Clinical Meeting, New Orleans, Louisiana; December 2024

- **McCarty R, Zhong C, Terrell B, Pass S.** Improving Pharmacy Student Education by Integrating Narrative Medicine Assignments. ASHP Midyear, December 9-12, 2024.
- **McCarty R, Zhong C, Terrell BT, Pass S.** Improving pharmacy student education by integrating narrative medicine assignments. Poster presented at ASHP Midyear Clinical Meeting; December 9-10, 2024. New Orleans, LA.
- Crosley M, **Selby C.** Hepatitis B Screening Practices in the Setting of Immunotherapy Related Adverse Events. NCODA International Spring Forum 2024. Dallas, Texas
- **Mohiuddin K, Reeb O, Gorczyca H, Musharof A, Cullins C, Selby AR.** Small gestures, big impact: fostering pharmacy student well-being. American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting 2024. New Orleans, LA
- **Sleeper RB, Brown K.** Comparison of by-domain performance outcomes within course exams to NAPLEX domains. Poster presented at AACP Annual Meeting, July 21-22, 2024 Boston, MA
- **Shreyas Ramchandra Gaikwad, Sanjay K. Srivastava** (2024). MBO enhances anti-tumor immunity in pancreatic ductal adenocarcinoma by inducing immunogenic apoptosis [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- Mahesh Arunachalam, **Shreyas Gaikwad**, Sharavan Ramachandran, **Sanjay K. Srivastava** (2024). New generation drug development from in-silico identification to preclinical evaluation in glioblastoma [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Marina Curcic, Shreyas Gaikwad, Sanjay K Srivastava** (2024). Targeting the β -catenin signaling axis in osteosarcoma [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Shreyas R. Gaikwad**, Mohamed A. Eltokhy, Morgan Moore, Keerthi Kailath, **Sanjay K. Srivastava** (2024). Disrupting cytoplasmic proton motive force induces ferroptotic cell death in colorectal cancer: A novel anti-cancer mechanism [abstract]. Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 2 (Late-Breaking, Clinical Trial, and Invited Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Wilkerson.** International Association for the Study of Pain 2024 - Mitragynine Reverses Paclitaxel Chemotherapy-Induced Peripheral Neuropathy and Sarcoma Bone Pain-Induced Peripheral Neuropathy. Amsterdam, NE
- **Wilkerson.** US Association for the Study of Pain 2024 - Mitragynine Reverses Paclitaxel Chemotherapy-Induced Peripheral Neuropathy. Seattle, WA

- **Wilkerson.** BBC 2024 - Mitragynine Reverses Paclitaxel Chemotherapy-Induced Peripheral Neuropathy. San Antonio, TX
- **Wilkerson.** Society for Research on Nicotine and Tobacco 2024 – The terpene alpha-terpineol decreases nicotine withdrawal signs in mice. Edinburgh, Scotland, UK
- **Wilkerson.** ASPET 2024 – The terpene alpha-terpineol decreases nicotine withdrawal signs in mice. Baltimore, MD
- **Wilkerson.** ASPET 2024 – The GIRK1/2 Allosteric Modulator GAT 1508 attenuates paclitaxel-induced peripheral neuropathy. Baltimore, MD
- **Wilkerson.** BBC 2024 – The terpene alpha-terpineol decreases nicotine withdrawal signs in mice. San Antonio, TX
- **Wilkerson.** BBC 2024 The Respiratory effects of Mitragynine and 7-Hydroxymitragynine on Sprague Dawley Rats – San Antonio, TX
- **Wilkerson.** CPDA 2024 The Respiratory effects of Mitragynine and 7 Hydroxymitragynine on Sprague Dawley Rats - Boston, MA
- **Wilkerson.** CPDA 2024 – The GIRK1/2 Allosteric Modulator GAT 1508 attenuates paclitaxel-induced peripheral neuropathy. Boston, MA
- **W Paulishak, J Lyu, M VanNieuwenhze, L Wood.** Bugs as drugs (listeria monocytogenes as vehicles for cancer therapeutics). ACS Fall 2024.
- **Grabenhorst C, Zhong C.** Metformin's Dark Side: A Case Report on Nightmares Triggered by a Common Diabetes Drug. ASHP Midyear, December 8-12, 2024.

PRESENTATIONS

- **Abbruscato.** Chaired a symposium on “Advances in Translational Basic Science in Stroke” at the AHA International Stroke Conference, Feb 6-9th in Phoenix, AZ. Abbruscato. TECHRx Event, Seminar on “Time Management in Science”, March 27, 2024
- **Aburahma, Bohn, & Fernandez.** AACP Leadership and Technology Sigs. Talking Tech in Texas: Pharmacy Student Perceptions of the Use of Artificial Intelligence (AI) in the Pharmacy Classroom
- **Ahmed.** Speaker at Advanced Drug Discovery and Development, virtual | SESSION II: Drug target identification and validation. <https://conferences.nature.com/event/DrugDiscovery/summary>
- **Ahmed.** Speaker at Late breaking basic science, American Heart association meeting, Chicago, IL.
- **Ahmed.** Distinguished speaker at 7th annual Abelina Interdisciplinary Symposium in Cancer

and Biomedical Research.

- **Ahmed.** Speaker at the 8th International Conference on Drug Discovery and Lead Optimization, Boston
- **Ahmed.** Invited Speaker at Sarver Heart Center, University of Arizona, Tucson, AZ.
- **Ahmed.** Panelist Journals Workshop: Opening the Blinds on the editorial and review process, Washington, DC.
- **Ahmed.** Invited attendee to “Second PURPOSE for early-career Pain Researchers”, NIH meeting, MD.
- **Ahmed.** Speaker at Texas Center for Comparative Cancer Research (TC3R) webinar series, Amarillo
- **Alvarez CA.** Interdisciplinary Collaboration and Career Development: Failure and Persistence. University of Texas School of Pharmacy Research Seminars, Austin TX, April 2024
- **Bailey TA,** Borchert JS. Bone Health Updates: “Breaking” Down Literature in Special Populations for Treatments of Osteoporosis and Other Bone Disorders. [ACPE-accredited/BPS-certified] ASHP Mid-year Annual Meeting. December 2024; New Orleans, LA.
- **Bailey TA,** Borchert JS. Bone Health Updates: “Breaking” Down Literature in Special Populations for Treatments of Osteoporosis and Other Bone Disorders. [ACPE-accredited/BPS-certified] ACCP Annual Meeting. October 2024; Phoenix, AZ.
- **Bailey TA.** Complex Case: Skilled Nursing Care. [ACPE-accredited/BPS-certified] ACCP/ ASHP BCGP Preparatory Course. Recorded 2 hour presentation for home-study. May 2024.
- **Bailey TA.** What?! Where?! Sensory Loss in the Older Adult and How to Avoid Ageism in Your Practice. [CME-accredited] Presentation for outpatient therapy department at Hendrick Center for Rehabilitation. May 2024; Abilene, TX.
- **Bailey TA.** Mastering Medications: A Prescription for Healthy Aging. Presentation for The Women’s Club of Lubbock. Oct 2024; Lubbock, TX. Invited.
- **Basinger R.** Vaccine Updates. MSHP Annual Seminar. Dallas, Texas. February 2, 2024.
- **IForumRX.** Managing COPD: 2024 GOLD Guideline Updates and More. July 17, 2024.
- **Basinger R, Lacey C, Van Dyke A.** Introduction to Lifestyle Medicine. VISN 17 Noon discussion. Dallas, Texas. July 24, 2024.
- **Bickel.** Pharmacokinetic Analysis of BBB Integrity and Permeability in Animal Models Invited

Speaker and Panelist, NIA-hosted Workshop on “Blood-Brain Barrier Transport in Aging and Alzheimer’s Disease” April 24-25, 2024

- **Bohn.** May 2024- TTUHSC Graduate School of Biomedical Sciences Commencement Keynote Speaker, Featured due to winning TTUHSC GSBS Outstanding Alumni Award, Lubbock, TX May 3, 2024
- **Sara Brouse** “Antithrombotic therapy after structural heart interventions: what (if anything) does the data say?” Speaker & Panelist at the ACC.24 73rd Annual Scientific Session, Atlanta, GA. April 6, 2024. Audience type: interprofessional (cardiologists, NP, PA, pharmacists)
- Huseman K, **Campbell LS**, Datta P, Krutsch K. Minimal transfer of atorvastatin and its metabolites in human milk: a comprehensive case report. Poster presentation. Amarillo Research Symposium. Amarillo, Texas; April 2024.
- **Shawhart J, Notturmo-Strong D, Jacob G, Campbell L, Coomer T, Lenz R.** Fostering Appropriate Consumer Medication Disposal. US Pharm. 2024;49(12):14-18.
- **Clifford KM.** Pharmacotherapy Review and Recertification Course: Complex Nursing Home Case. BCPS and CE credit presentation. 2024 Pharmacotherapy Specialty Review and Recertification Course and Recertification Program. American Society of Health-System Pharmacists Midyear Clinical Meeting. New Orleans, Louisiana. December 2024
- **Clifford KM.** Guiding Lights: New Updates to UTI Guidelines for Pharmacists to Lead Stewardship Initiatives. BCGP/CE presentation for the American Society of Consultant Pharmacists Pre-Meeting Symposia. Denver, Colorado. November 2024.
- **Clifford KM.** Integrating Care for Diabetic and Urological Conditions: Concerns for Both Conditions. 2024 CE presentation for the Society of Urological Nursing Association (SUNA) Conference. September 2024
- **Clifford KM.** Geriatric Pharmacotherapy: Updates in Urology Nursing. CE presentation/meeting pre-symposia for the Society of Urological Nursing Association (SUNA) Conference. Orlando, Florida. September 2024
- **Clifford KM.** Long-Term Impact of Medication Shortages and Substitutions. CCE presentation/meeting pre-symposia for the Society of Urological Nursing Association (SUNA) Conference. Orlando, Florida, September 2024
- **Clifford KM.** Guardians of Aging: Unveiling the Interplay of Antimicrobial Agents, Drug-Drug Interactions, Immunosenescence, and Pharmacokinetic Changes in the Older Adult. South Central American Society of Consultant Pharmacists. Houston, Texas. April 2024
- **Clifford KM.** Tu K. Alzheimer’s Medication Updates. Zoom presentation for The Senior Source. Recorded for use by The Senior Source. Dallas, Texas. September 2024

- **Cox CD.** Advancing Clinical Pharmacy Through Education and Practice: Where are we Know? Peking University School of Pharmaceutical Sciences – BoYa Clinical Pharmacy Forum. Beijing, China. November 2024.
- **Cox CD.** Emotional Intelligence Workshop. Academic Leadership Fellows Program for the American Association of Colleges of Pharmacy (AACP). Washington DC. October 2024.
- **Cox CD.** Start of Preceptor Journey: Self Discovery. United Arab Emirates Preceptor Certification Program. Virtual Presentation. September 2024.
- **Cox CD.** Keys to Collaborative Excellence in a Healthcare Team: CAPs Interdisciplinary Panel. Student National Pharmaceutical Association (SNPhA) Annual Meeting. Los Angeles, CA. August 2024.
- **Cox CD.** The Art of Feedback. MiSR International University Faculty of Pharmacy - Egypt. Virtual Presentation. July 2024.
- **Cox CD.** Getting Involved and Creating Your Network. Gamma Xi: University of South Carolina College of Pharmacy. Virtual Presentation. April 2024.
- **Cox CD.** Preceptors are Like Onions: Layered Learning at its Best. American Pharmacists Association (APhA National Conference). Orlando, FL. March 2024.
- **Cox CD.** Preceptor Week Day 1 - 5. Topics included: Dealing with Common Challenges on Experiential Rotations, Kicking Off a Rotation: Orientation Pearls, Help Me, I Have No Time For My Students!, Preceptor Burnout: Can Anything Help?, and How to Fail a Student on an Experiential Rotation. Virtual Presentations to national audience. March 2024.
- **Cox CD.** Evolving Landscapes in Pharmacy. Cencora Health-System Advisory Board. Miami, FL. February 2024.
- **Cox CD.** ACPE / AACP / Al Ain University Faculty Development Workshop: Best Practices in Assessment in Pharmacy Education [Co-presented a 2-day workshop]. Dubai, United Arab Emirates. January 2024.
- **Craig Cox** Emotional Intelligence. Created a 60-minute presentation that was part of the CLEAR Leadership Certificate program created by the American Association of Colleges of Pharmacy (AACP). July 2024
- **Craig Cox** ACPE / AACP / Al Ain University Faculty Development Workshop: Best Practices in Assessment in Pharmacy Education [Co-presented a 2-day workshop (provided two, one-hour presentations) with Sarah Shrader, Melissa Medina, and Mike Rouse]. Dubai, UAE. January 2024.
- **Erica Dominguez** Invited to present at ACCP Annual Meeting 2024: Early Cognitive Changes in Persons at Risk for Dementia

- Unraveling neonatal outcomes of in utero SSRI exposure. Panhandle Neonatal-Perinatal Symposium, Amarillo, TX, September 2024.
- **German.** Medicinal Chemistry and Drug Discovery, WTAMU (State)
- **German.** Developing safe polypharmacology agents for the treatment of TNBC, Pharma R&D – 6th International Conference on PharmScience Research & Development (international)
- **German.** Panel member at “Discoveries to Impact: Innovation Launchpad Panel Discussion”, Innovation Hub, TTU, Lubbock (State)
- **German.** Polypharmacology-based approach to treat CNS disorders, Department of Chemistry and Biochemistry, TTU (State)
- **German.** One Health Club, TTU (local)
- **Charlton A, Haase K.,** Jones T, LaNou E. Researching Board Certification with the 2022-2023 Seed Grant Recipients, Amanda Charlton, Krystal Haase, and Tim Jones. The BPS Board-Certified Pharmacist Podcast. April 23, 2024.
- **Hall RG 2nd** “Antifungal dosing in obesity” at ID Week; Los Angeles, California, October 2024
- **Higbea A,** Bishop K, **Sleeper R,** et al. “Starting Strong Together: A Live Introductory IPE Anatomy and Patient Safety Event.” Texas IPE Consortium Annual Meeting; Apr 11, 2024; San Antonio, TX.
- **Jones.** “Education Challenges Workshop”, developer and co-moderator, presented during each of 3 days at the STRIPE Annual Meeting and Consensus Workshop, Rockville, MD, October 23-25, 2024. <https://open.spotify.com/episode/6Ynoh3SzryTtcnzzmZxNrM> (national/international)
- **Krueger CK.** Updates in the management of acute decompensated heart failure. Lecture presented: Health.edu; March 2024; Dallas, TX. ACPE accredited for pharmacists and pharmacy technicians for 0.1 CEU.
- **Ninh M. La-Beck,** Jalpa Patel, Rakibul Islam, Patricia Back, **Trey Putnam,** Alberto Gabizon. Biocompatible but not inert: liposomal carriers generate immune modulatory oxysterols, inhibit antitumor immune responses, and promote tumor growth in murine models. Texas Academy of Medicine, Engineering, Science, and Technology (TAMEST) Annual Conference. Austin, TX, Feb 5-7, 2024.
- **Lowe.** Seminar Speaker, TTUHSC Department of Immunology and Molecular Microbiology; Lubbock, TX
- **Becky Mahan** Acute management of acute repetitive or prolonged seizures in older adults and intellectually/developmentally delayed individuals with epilepsy Invited to present at 3 separate pharmacist venues: -ASCP Northeast Meeting; Marlborough, MA April 2024

- **Becky Mahan** -ASCP South Central Meeting; Houston, TX April 2024
- **Becky Mahan** -NVSHIP/NPHA Meeting; Reno, NV Sept 2024
- **Becky Mahan** Acute management of acute repetitive or prolonged seizures in older adults and intellectually/developmentally delayed individuals with epilepsy. Invited to present at 3 separate pharmacist venues: -ASCP Northeast Meeting; Marlborough, MA April 2024
- **Mahan RJ.** Acute management of acute repetitive or prolonged seizures in older adults and intellectually developmentally delayed individuals with epilepsy. [ACPE Accredited] NVSHIP/ NPHA Meeting. Reno, NV. Sept 2024.
- **Mahan RJ.** Acute management of acute repetitive or prolonged seizures in older adults and intellectually developmentally delayed individuals with epilepsy. [ACPE Accredited] ASCP Northeast Meeting. Marlborough, MA. April 2024.
- **Mahan RJ.** Acute management of acute repetitive or prolonged seizures in older adults and intellectually developmentally delayed individuals with epilepsy. [ACPE Accredited] ASCP South Central Meeting. Houston, TX. April 2024.
- **Markiewski M.** 8th Annual Complement-Based Drug Development Summit (Expert Speaker)
- **Mathys M.** Treating Insomnia in Older Adults: Determining Risks Versus Benefits of Drug Therapy. BCGP Recertification Webinar Series, March 2024.
- **Monica Mathys** Treating Insomnia in Older Adults: Determining Risks Versus Benefits of Drug Therapy. BCGP Recertification Webinar Series, 3/2024
- **Monica Mathys** Psychiatric Medication Use in Older Adults. UT Southwestern Medical Center Psychiatric Residency (PGY1 & PGY2) Didactics, Dallas, TX, 6/2024 & 8/2024
- **Monica Mathys** Pharmacotherapy Options for Treatment of Dementias. UT Southwestern Medical Center Geriatric Psychiatry Fellowship Didactics, Dallas, TX, 1/2024
- **Monica Mathys** Drug Interactions Associated with Psychotropic Medications. UT Southwestern Medical Center Geriatric Psychiatry Fellowship Didactics, Dallas, TX, 8/2024
- **Monica Mathys** Pharmacokinetic and Pharmacodynamic Changes in the Elderly Patient. UT Southwestern Medical Center Geriatric Psychiatry Fellowship Didactics, Dallas, TX, 8/2024
- Endocrine and Metabolic Disorders. Presented at the 2024 ACCP Updates in Therapeutics: The Pharmacotherapy Preparatory Review and Recertification Course. Webinar May 2024.
- Contemporary Weight Management: The Pharmacist's Role. Clinical Reasoning Series in Pharmacotherapy presented at the 2024 American College of Clinical Pharmacy Annual Meeting.

Phoenix, AZ. October 2024.

- “Pharmacy-focused Approaches in the Community” for Session: Crossing the Chasm Between Hypertension Guidelines, Clinicians, and Patients: Time to Act. American Heart Association Scientific Sessions 2024, Chicago, IL, 11/16/2024
- “Using Team-Based Care with Pharmacists to Help Achieve the Quadruple Aim.” Guest Lecture, TTUHSC School of Medicine Business Elective, Lubbock, TX, 12/02/2024.
- “Treatment of Hypertension.” 2-hour workshop, Department of Family Medicine, TTUHSC School of Medicine, Amarillo, TX, 08/28/2025.
- **Minze MG.** Endocrine and Metabolic Disorders. ACPE 2024 ACCP Updates in Therapeutics: The Ambulatory Care Preparatory Review and Recertification Course. March 2024. Didactic based curriculum national webinar (1.5 hours). National - invited
- **Selby C.** Focus on Small Cell Lung Cancer: Evolving Treatment Strategies to Improve Outcomes. Post Graduate Institute for Medicine. Virtual. Presented live 08/24.
- Sweet Liberation: Defeating Diabetes with Lifestyle Interventions. CE presented at ACCP Annual Meeting. Phoenix, AZ. Oct 2024. [Invited presentation].
- **Shreyas Ramchandra Gaikwad, Sanjay K. Srivastava** (2024). MBO enhances anti-tumor immunity in pancreatic ductal adenocarcinoma by inducing immunogenic apoptosis [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- Mahesh Arunachalam, **Shreyas Gaikwad**, Sharavan Ramachandran, **Sanjay K. Srivastava** (2024). New generation drug development from in-silico identification to preclinical evaluation in glioblastoma [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Marina Curcic, Shreyas Gaikwad, Sanjay K Srivastava** (2024). Targeting the β -catenin signaling axis in osteosarcoma [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 1 (Regular Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Shreyas R. Gaikwad**, Mohamed A. Eltokhy, Morgan Moore, Keerthi Kailath, **Sanjay K. Srivastava** (2024). Disrupting cytoplasmic proton motive force induces ferroptotic cell death in colorectal cancer: A novel anti-cancer mechanism [abstract]. Proceedings of the American Association for Cancer Research Annual Meeting 2024; Part 2 (Late-Breaking, Clinical Trial, and Invited Abstracts); 2024 Apr 5-10; San Diego, CA. Philadelphia (PA).
- **Wilkerson.** Carolina Cannabinoid Collaborative 2024 – The terpene alpha-terpineol decreases nicotine withdrawal signs in mice. Richmond, VA

- **Wilkerson.** Texas Tech University Health Sciences Center, School of Pharmacy, Department of Immunotherapeutics and Biotechnology, Abilene, TX (Regional)
- **Wilkerson.** Dalhousie University, School of Medicine, Departments of Anesthesia, Pain Management & Perioperative Medicine, Pharmacology, Microbiology and Immunology, Halifax, Nova Scotia, Canada (International)
- **Wilkerson.** Virtual 2024 Symposium on Substance Use Research (SOSUR) Panel Discussant – Use & Misuse of Plant-Based Drugs. Sponsored by Rural Drug Addiction Research Centers (National)
- **Wilkerson.** US Association for the Study of Pain 2024 – Sex Differences in a Mouse Migraine Model. Seattle, WA



FACULTY AND STAFF NEWS AND RECOGNITION

FACULTY RECEIVE NEW APPOINTMENTS



Trista Bailey, Pharm.D., was appointed Division Head of Geriatrics and Pediatrics. Bailey has been a valuable member of our Abilene campus since 2012 and is a practicing geriatric consultant pharmacist.



Mary Klein, Pharm.D., was appointed Director of Clinical Correlations. We are excited about Klein's vision and plans for mapping clinical correlations content and coordinating with all teams to elevate our curriculum.



Becky Mahan, Pharm.D., was appointed Vice Chair of Experiential Education. Mahan has been a valued member of our Abilene campus faculty since 2014.



Years of Service RECOGNITION

TEAM MEMBERS RECOGNIZED FOR YEARS OF SERVICE

A series of Years of Service recognition ceremonies were held across TTUHSC campuses over the summer. Awards are presented based on the team member's years of service to the university in five-year increments. The 2024 School of Pharmacy honorees include:

- **5 YEARS**

Missy Caton, Emily Buatois, Meggan Domzalski, Heather Houser, Ronica Farrar, Dhavalkumar Patel, Bunny Pumphrey, Matthew White, Brett Bessac, Chelsea Krueger, Ashley Selby

- **10 YEARS**

Vicki Whiteaker, Robyn Wood, Abraham Al-Ahmad, Kaci Bohn, William Dyer, Michal Hodge, Vicente Rubio, Rebecca Young, Rachel Basinger, Kalin Clifford, Vindhya Edpuganti, Carl Ellis, Staci Moss

- **20 YEARS**

Devin Lowe, Robbi Rivers, Ming-Hai Wang

- **25 YEARS**

Mark Haase, Craig Cox, Brian Irons, Rebecca Sleeper



ABBRUSCATO ONE OF TWO TO RECEIVE FIRST STOCCO RESEARCH CHAIR ENDOWMENT

In a July 9 ceremony, Thomas Abbruscato, Ph.D., and Min Kang, Pharm.D., became the first recipients of the Douglas Stocco Research Chair, an endowment formerly known as the Texas Tech University Health Sciences Center's (TTUHSC) Research Endowment. The Texas Tech University System Board of Regents officially renamed the endowed chair in late November 2023 and made two appointments available.

Abbruscato, professor and chair in the Department of Pharmaceutical Sciences at the TTUHSCSOP, said it is an honor to receive the endowment.

"Personally, I am humbled to have this associated with Dr. Douglas Stocco, who has left a lasting legacy of research and service to TTUHSC," Abbruscato said. "I am excited to utilize these resources to move our NIH (National Institutes of Health) and FDA (Food and Drug Administration) projects forward."

Abbruscato's lab is currently investigating the effects of mixed tobacco product exposure on the blood-brain barrier, advancing their stroke-brain drug discovery project related to testing small molecule activators of brain neurolysin and evaluating the effects of nicotine on the blood-brain barrier and cognition, memory and motor coordination.

"I am honored to work at an institution that values collaboration and advancing knowledge through innovative research," Abbruscato said. "My research program would not have reached where it is today without the collaboration of so many students, staff and faculty. I especially want to thank many of the past and current Department of Pharmaceutical Sciences and School

of Medicine faculty I have collaborated with for their continued collegiality and support. It is a privilege to work in this type of research environment, and our Department of Pharmaceutical Sciences research support staff — Desmon Dunn, Stacy Schaffler and Matthew White — are phenomenal and always keep us moving forward.”

SIX SOP TEAM MEMBERS HONORED AT DISTINGUISHED STAFF AWARDS

TTUHSC-SOP had six team members honored at the 2024 Distinguished Staff Awards ceremony.

- Ulrich Bickel, M.D., Hiranmoy Das, Ph.D., Heather Grubb, and Jeanie Shawhart, Pharm.D., all at the Amarillo campus, were part of a team of 15 TTUHSC employees who received the “Quality Team Award”. The award recognizes a team of individuals who together epitomize the TTUHSC One Team value through open collaboration, constructive feedback, accountability, encouragement, and a team spirit that envelopes their daily interactions and long term goals.
- Rebecca Arredondo, business coordinator within in the Office of Experiential Programs at the Abilene campus, was awarded the “Quality Staff Award”. The award is presented to team members who continually demonstrate the TTUHSC value of Beyond Service by creating and delivering positive defining moments, anticipating the needs of others, and going the extra mile.
- Jean Haynes, M.Ed., senior director within in the Office of Experiential Programs at the Amarillo campus, was awarded the “Quality Supervisor Award”. The award is presented to supervisors who lead with consistency, compassion, and respect that enables those team members not only to achieve goals but develop and grow as contributors to TTUHSC.



SELBY RECEIVES EXCELLENCE IN TEACHING AWARD

In November, Chris Selby, Pharm.D., received the 2024 President's Excellence in Teaching Award. President's Excellence Awards recognize faculty members who have demonstrated unparalleled contributions to medical education, research and clinical care.



KING SELECTED AS NEXT LEVEL LEADER

Randi King, assistant director for experiential programs at the Abilene campus, was one of 15 TTUHSC team members selected to participate in the Next Level Leaders Program through the Office of People and Values. The 6-session program is designed for TTUHSC team members with at least three years of supervisory experience and seeks to further develop their personal and professional leadership style.



HAASE RECEIVES CHANCELLOR'S AWARD

On January 17, Texas Tech University System Chancellor Tedd L. Mitchell, M.D., TTUHSC President Lori Rice-Spearman, Ph.D., and TTUHSC Provost and Chief Academic Officer Darrin D'Agostino, D.O., presented the 2025 Chancellor's Council

Distinguished Teaching & Research Awards. Recognizing academic excellence, the honors are the most prestigious awards granted to faculty throughout the TTU System. Krystal Haase, Pharm.D., was one of three recipients of the Chancellor's Council Distinguished Teaching Award.

Haase, a professor in the TTUHSCSOP Department of Pharmacy Practice and the school's Regional Dean at Amarillo, is a board-certified specialist in Pharmacotherapy and has practiced for 24 years as a critical care pharmacist in the medical intensive care unit at Northwest Texas Hospital in Amarillo.

Dr. Haase has served as a preceptor for over 340 pharmacy students and residents, established 15 new residency programs across four TTUHSC campuses and procured \$1.86 million in external funding by creating residency affiliations. Additionally, Dr. Haase established the innovative PGY1/PGY2 Pharmacotherapy Residency and directed it for 15 years, training 40 residents who have advanced into prominent roles in academia, clinical practice and health care leadership.

She also led the creation of the school's hybrid Pioneer Pathway curriculum, the first of its kind in Texas, which seated its inaugural class in fall 2024. She introduced innovative teaching methodologies, such as visual “memory anchors” for antimicrobial agents and the “Battle of the Bugs” competition for case discussion preparedness. Dr. Haase's work has been recognized with numerous awards, including the 2017 TTUHSC President's Award for Excellence in Teaching and eight Teaching Team of the Year honors from the pharmacy school.

As a clinical scholar, Dr. Haase's research focuses on optimizing medication therapy and expanding pharmacist roles in underserved areas. She has published 28 peer-reviewed journal articles, three book chapters, and two editorial reviews and contributed to national pharmacy education standards. Dr. Haase also serves on the editorial board for the Journal of the American College of Clinical Pharmacy.

TWO NAMED UNIVERSITY DISTINGUISHED FACULTY



University leadership presented the 2025 TTUHSC University Distinguished Faculty Awards on January 30 at the State of the University event in Lubbock. The title of “distinguished faculty” is granted each year to faculty members who have clearly exhibited outstanding achievement in teaching, research and service. Recipients hold this honor throughout the remainder of their active service at TTUHSC. School of Pharmacy faculty members, Eric MacLaughlin, PharmD, and Lance McMahon, PhD, were among those honored.



FACULTY AND STAFF HONORED AT EVENTS

On May 14, all four TTUHSCSOP campuses participated in the annual Celebration of Achievement. The event included recognition for P4 awards, student professionalism, leadership awards, faculty teacher and teams of the year, staff achievement and preceptor awards.

Three staff members, Amanda Hines (Dallas), Jean Haynes (Amarillo) and Mackenzie Lewis (Abilene) received the Staff Mentor Award for their campus, while Allison Rogers (Abilene) and Jacey Brown (Dallas) received the Excellence in Staff Services Award.

For Faculty, Teachers and Teaching Teams of the Year were recognized for each of the P1–P3 classes. The awardees for each class are as follows:

The P1 class named Amal Abruahma, Ph.D., as Teacher of the Year and the Biological Foundations in Pharmacy team, made up of Kaci Bohn, Ph.D., Quentin Smith, Ph.D., and Russell Snyder, Ph.D., as the Teaching Team of the Year.

The P2 Class named Drew Ramirez, Pharm.D., as Teacher of the Year and the Integrated Therapeutics & Practice IV: Infectious Diseases team, made up of Kalin Clifford, Pharm.D., Nadezhda German, Ph.D., Drew Ramirez, Pharm.D., Ashley Selby, Pharm.D., Russell Snyder, Ph.D., and Ming-Hai Wang, Ph.D., as the Teaching Team of the Year.

The P3 class named Chris Selby, Pharm.D., as Teacher of the Year and the Integrated Therapy and Practice V: Neurosensory/Psychiatry team, made up of Amal Abruahma, Ph.D., Alejandra Fernandez, Ph.D., Monica Mathys, Pharm.D., Rebecca Sleeper, Pharm.D., Quentin Smith, Ph.D., and Jenny Wilkerson, Ph.D., as the P3 Teaching Team of the Year.

The P4 class, selected Debra Notturmo-Strong, Pharm.D., as the Most Influential Professor, which recognizes the faculty member who has had a significant impact on the student body and exhibited superior leadership, dedicated service and teaching excellence.

A photograph of a female student in a white lab coat and safety glasses, smiling as she works in a chemistry laboratory. She is holding a small object over a beaker. The background shows other students and lab equipment, all under a strong red color overlay. A dark red rectangular box is positioned in the lower right, containing the text 'STUDENT ACHIEVEMENTS' in white.

STUDENT ACHIEVEMENTS



STUDENTS LEARN RESIDENCY MATCH ASSIGNMENTS

On March 19, 21 pharmacy students interested in completing a residency after they graduate learned where they would spend the next stage of their training during Phase I of Pharmacy Residency Match Day. An additional 6 students found out during Phase II. The post-match scramble, one outside match, and a match made in May brought our totals to 29 students matching with PGY-1 programs. Students who matched with residency programs include:

- **PGY-1 Pharmacy**

- Janelle Agolue – Children’s National Hospital, Washington, D.C.
- Aava Azad – Houston Methodist Hospital, Houston, Texas

- Chandler Batson – Medical University of South Carolina – MUSC Health, Charleston, S.C.
- Som Bahadory – VA North Texas Health Care System, Dallas, Texas
- Felicia Chavez – Baylor Scott & White Medical Center, Temple, Texas
- Faith Collum – Methodist Charlton Medical Center, Dallas, Texas
- Hannah Gorczyca – UofL Health – UofL Hospital, Louisville, Ky.
- Chloe Grabenhorst – Texas Health Presbyterian Dallas, Dallas, Texas
- Irina Gradinaru – Medical City Plano, Plano, Texas
- Armand Ghazanfar-Pour – BSA Health System, Amarillo, Texas
- Taygan Henderson – Houston Methodist Hospital, Houston, Texas
- Brayden Key – Covenant Health System, Lubbock, Texas
- Ronnie McCarty – South Texas Veterans Health Care System, San Antonio, Texas
- Khadijah Mohiuddin – Methodist Richardson Hospital, Richardson, Texas
- Afsana Musharof – Dallas Children’s Medical Center, Dallas, Texas
- Alán Nguyen – Children’s Hospital of the King’s Daughters, Norfolk, Va.
- Brenda Ortiz – Cook Children’s Medical Center, Fort Worth, Texas
- Olivia Reeb – Dallas Children’s Medical Center, Dallas, Texas
- Michaela Reynolds – Baylor Scott & White Medical Center, Temple, Texas
- Senco Selimovic – Texas Health Harris Methodist Hospital, Fort Worth, Texas
- Elijah Singh – Medical City Plano, Plano, Texas
- Atik Syed – Norman Regional Health System, Norman, Okla.
- Kim Tu – JPS Health Network, Fort Worth, Texas
- Sritej Veeramachaneni – Cheyenne Regional Medical Center, Cheyenne, Wyo.
- Patrick Williams – Texas Health Harris Methodist Hospital, Fort Worth, Texas
- Huiyan Yang – Lovelace Medical Center, Albuquerque, N.M.
- Joel Zapata – Tampa General Hospital, Tampa, Fla.

PGY-1 Community

- Jamie Nguyen – Baylor Health Enterprises, Dallas, Texas

PGY-1 Indian Health Services

- Jonathan Chavez – Northern Navajo Medical Center, Shiprock, N.M.

PGY-2 Residency

11 TTUHSC Jerry H. Hodge School of Pharmacy alumni successfully matched with PGY-2 programs.

- Vivian Ho – Pediatrics, Cook Children's Medical Center, Fort Worth, Texas
- Bryan Hoang – Oncology, Harris Health System, Houston, Texas
- Lindsay Johnson – Critical Care, UT Southwestern Medical Center, Dallas, Texas
- Parker Lenheiser – Oncology, The University of Texas MD Anderson Cancer Center, Houston, Texas
- Brandon McCormick – Critical Care, Texas Health Harris Methodist Hospital, Fort Worth, Texas
- Traylor Moses – Oncology, Aurora St. Luke's Medical Center–Aurora Health Care Metro, Milwaukee, Wis.
- Cheyanna Petty – Pediatrics, Cook Children's Medical Center, Fort Worth, Texas
- Vivian Pham – Solid Organ Transplant, CHI St. Luke's Health/Baylor St. Luke's Medical Center, Houston, Texas
- Danh Phan – Infectious Diseases, Memorial Hermann–Texas Medical Center, Houston, Texas
- Jacob Sanchez – Critical Care, Texas Health Presbyterian Dallas, Dallas, Texas
- Andy Shi – Oncology, University of Iowa Health Care, Iowa City, Iowa

“We are all so very excited and extremely proud of our students and alumni who matched,” Edwards said. “They have each put in a lot of work and preparation to get where they are today. I look forward to seeing where they end up and their future accomplishments after their residency training.”



HERRIN SECURES FELLOWSHIP

Jake Herrin, P4 at the Dallas campus, accepted a Field Medical Affairs/MSL Fellowship with Neurocrine Biosciences/USC.

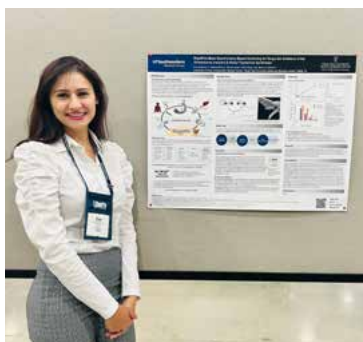
LEADERSHIP AND HONORS

TWO STUDENTS SELECTED FOR DAPA SCHOLARSHIP



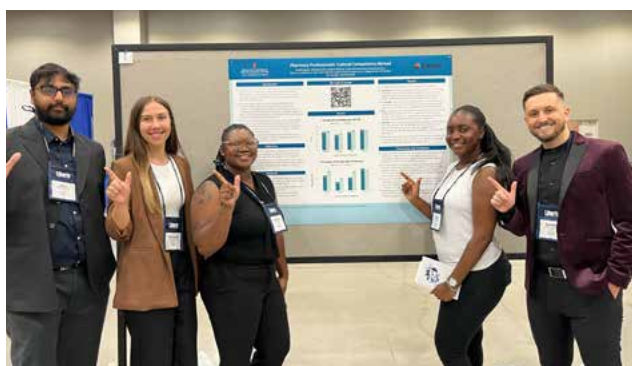
TTUHSCSOP students, Afsana Musharof and Asha Oommen, were selected as 2024 recipients of the Dallas Area Pharmacy Association (DAPA) Scholarship. The scholarship is awarded to applicants who demonstrate achievements and involvement in pharmacy school, the student chapter of TPA, and community activities. Musharof and Oommen were guests of honor at DAPA's October meeting.

STUDENTS EARN TOP HONORS AT TPA CONFERENCE AND EXPO



A student team, made up of Hannah Gorczyca, Chloe Grabenhorst, Afsana Musharof, and Taygan Henderson, won 1st place in the State Championship of the Student Pharmacist Self-Care Competition at the 2024 Texas Pharmacy Association (TPA) Conference

and Expo. Afsana and Grace Onaiwu took top awards in the Student Patient Counseling Competition and Afsana and Duke Cullins both received scholarships from TPA. In addition, several students, including Irina Gradinaru, Janelle Agolue, Michayla Harris, Senco Selimovic, Mackenzie Gunn and Sritej Veeramachaneni, presented posters.



TTUHSC TEAM MEMBER AND TWO STUDENTS FEATURED IN PHARMACY TIMES



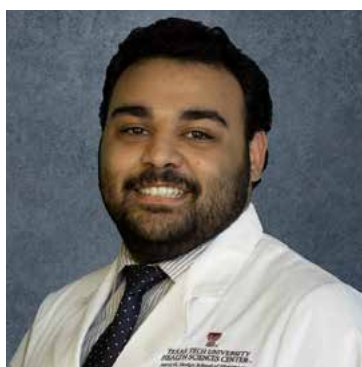
Ajay Sharma, PhD, Adjunct Clinical Assistant Professor in the Department of Pharmacy Practice and TTUHSC pharmacy students Allyson and Madison Gill, P2s at the Amarillo Campus, were recently featured in Pharmacy Times with an article titled “Are OTC Proton Pump Inhibitors a Boon Or a Curse?”

POLANI ONE OF TWENTY NATIONWIDE TO RECEIVE AWARD



Congratulations to Maheen Polani, P2 at the Dallas campus, for being one of twenty-one students selected nationally to receive the 2024 CVS Health/AACP Community Pharmacy Health Equity Award. The award recognizes leadership, dedication to advancing the profession of pharmacy, and commitment to improving patient care in underserved communities. Each awardee receives a \$20,000 scholarship thanks to the generous support of the CVS Health Foundation.

URECH, IBRAHIM HAVE FIRST ARTICLE FEATURED AS VIZIENT HOT TOPIC



Julien Urech and Youssef Ibrahim, P3s at the Dallas campus, were published as the August 2024 Vizient Hot Topic. The pair worked with the Vizient Antimicrobial Stewardship to publish their first article, titled “Is it safe to give cefazolin to patients with penicillin allergies? A shift in the surgical prophylaxis paradigm.”

NGUYEN, MUSHAROF PLACE IN TOP 10 NATIONALLY



Alán Nguyen and Afsana Musharof, P4s at the Dallas campus, finished in the top 10 of the American Society of Health-System Pharmacists National Clinical Skills competition, where approximately 160 teams competed. This is only the second time in school history that we've had a team place in the top 10 nationally, the first time being in 2021.

MONTENEGRO APPOINTED TO APHA SIG



Itzayanne Montenegro, P2 at the Abilene campus, was appointed to the American Pharmacists Association (APhA) special interest group (SIG) of Care of Underserved Patients and is serving as a community leader member at large for 2025-2026.

NORONA, OOMMEN, CRENSHAW ADVANCE TO ROUND 3



Morgan Norona, Asha Oommen and Sheridan Crenshaw, all P2s at the Dallas campus, were members of one of only 20 teams nationwide to have advanced to Round 3 of the American College of Clinical Pharmacy - ACCP Clinical Research Challenge.

STUDENT ACHIEVEMENTS HONORED

On Wednesday, May 14, all four of our campuses participated in the annual Celebration of Achievement. During the event the hard work and accomplishments of professional organizations, government, students, faculty and staff were acknowledged. Student award recipients included:

- Denise Anderson, P4 at Abilene, was the 2025 Bowl of Hygieia recipient, an award presented to the graduating class member who is deemed to best exemplify the qualities most desirable in a pharmacist: leadership, high ethical standards, dedication and promotion of the pharmacy profession
- Chandler Batson, P4 at Amarillo, received the Wolters Kluwer Excellence in Clinical Communication Award
- Afsana Musharof, P4 at Dallas, received the Viatrix Excellence in Pharmacy Award
- Michaela Reynolds, P4 at Amarillo, received the Superior Patient Care Award
- Faith Collum, P4 at Dallas, received the Excellence in Geriatrics Award
- Chandler Batson, P4 at Amarillo, and Alán Nguyen, P4 at Dallas received the Dr. Janie Robles Excellence in Pediatrics Award
- Denise Anderson, P4 at Abilene, received the Community Outreach Award of Excellence
- Jamie Nguyen, P4 at Dallas, received the Excellence in Community Practice Award
- McKenzie Linley, P4 at Abilene, received the Hannah L. Thompson Perseverance Award
- Ronnie McCarty, P4 at Dallas, received the Excellence in Ambulatory Care Award
- Chandler Batson, P4 at Amarillo, received the Excellence in Inpatient Clinical Practice Award
- Taygan Henderson, P4 at Dallas, received the Excellence in Interprofessional Education Award
- Oluwanbu Olanrewaju, P4 at Abilene; Chandler Batson, P4 at Amarillo; Irina Gradinaru, P4 at Dallas; and Darian Higgins, P3 at Lubbock; received the Outstanding Clinician Award
- Jordan Miller, P3 at Abilene; Reng Thanga, P3 at Amarillo; Ronnie McCarty, P4 at Dallas; and Maci Godbey, P3 at Lubbock; received the Outstanding Patient Advocate Award
- Denise Anderson, P4 at Abilene; Taylor Le, P3 at Amarillo; and Linh Hoang, P3 at Dallas; received the Outstanding Service Award
- Denise Anderson, P4 at Abilene; Blake Connell, P2 at Amarillo; and Michael Tierney, P2 at Dallas; received the Student Role Model Award
- Kreed Averhoff, Abilene; Madalyn Raymond, Amarillo; and Janika Tobias, Dallas; received the P1 Go Getter Award
- Amber Jones, Abilene; Justin Hierholzer, Amarillo; and Asha Oommen, Dallas; received the P2 Rising Clinician Award

SCHOLARSHIP AWARDS

Adcox: Duke Cullins, Brayden Key

Albertsons: Maneli Tahafi

Amarillo Area Foundation: Adalee Alvarez, Chandler Batson, Gracie Bentley, Ariana Borunda, Chandler Boyd, Jordan Campbell, M'Kenzi Campbell, Blake Connell, Lauren Covey, Cayley Crews, Katlyn Dence, Suha Garasia, Aide Gonzales, Cidnie Goodson, Jennifer Hale, Carlie Heiman, Justin Hierholzer, Roberto Jimenez Delgado, Rumana Khan, Katherine Kuehler, Katelyn Laminack, Whitlee LaRue, Taylor Le, Titus Lie, Camerino Lopez, Seng Mai, David Mara, Dominic Mashburn, Grace McDaniel, Norma Najera, Brooke Noble, Alyssa Oakes, Grace Onaiwu, Connor Pearson, Elizah Perez, Michaela Reynolds, Kamryn Rogers, Andrea Santiago Sepulveda, Logan Springer, Reng Thanga, Alexander Thompson, Madelynn Villanueva, Jayci Westphal, Huiyan Yang, Rachel Zant

Bexar County Pharmaceutical Association: Ronnie McCarty

Byrd Family: Darian Higgins

C.H. Foundation: Alexander Thompson

CAB Bond: Alexander Thompson

Carnes-Hollingsworth: Aysha Iqbal

Collins: Olivia Reeb

Cox: Reagan Bills

Davidson: Benjamin Baker

Dean's Leadership: Irina Gradinaru, Zainab Hamid, Van Hung Tran, Jayci Westphal

Dozier: Denise Anderson

Eckerd: Logan Bishop

Gerald Holman: Irina Gradinaru

HEB: Brenda Ortiz

Hollingsworth: Elyjah Farmer

Johnson: Reagan Bills

Kritser: Ariana Borunda, Addison Burrier, Kassidy Cockrell, Blake Connell, Lauren Covey, Suha Garasia, Jennifer Hale, Darian Higgins, Katherine Kuehler, Seng Mai, David Mara, Dominic Mashburn, Grace Onaiwu, Michaela Reynolds, Huiyan Yang

Kuo-Christy: Linh Hoang

MedcoHealth Solutions: Alexandria Arnett, Chloe Grabenhorst, Afsana Musharof

Michael Patry Memorial: Chandler Batson, Hannah Gorczyca

Nelson: Afsana Musharof

Presidential: Yasmin Amin, Gracie Bentley, Logan Bishop, Laren Lane Cabilla,

Nathan Charay, Madeline Clague, Niloufar FarsiAstaneh, Karli Fostel, Adriana Garcia, Leannabelle Green, Noah Hamilton, Bethany Hardesty, Carlie Heiman, Cinthia Hernandez, Lianna Jacob, Laura Johnson, Katelyn Laminack, Abigail Lindsey, Grace McDaniel, Eleanor Morris, Norma Najera, Ngoc Boi Khuyen Nguyen, Brooke Noble, Vivian Osborn, Genell Patel, Connor Pearson, Ashlyn Pickens, Madalyn Raymond, Richard Riley, Shandreka Robinson, Andrea Santiago Sepulveda, Shakyra Silva Gutierrez, Keziah Thomas, Janika Tobias, Alexis Trojan, Kenny Vu, Heidi Yantis

Purdue Pharma: Richard Riley

Roberta High: Ariana Borunda, Abigail Lindsey, Rhea Zaib

Rural Health: Reagan Bills, Logan Bishop, Ariana Borunda, Madeline Clague, Amy Cox, Katelyn Cozart, Ariana DeLisi, Elyjah Farmer, Cidnie Goodson, Caleb Gray, Payman Haghiri, Carlie Heiman, Justin Hierholzer, Ekon Juarez, Brittany Kelley, Ashley Kelly, Katherine Kuehler, Camerino Lopez, Dejene Mideksa, Lillian Motley, Caylee Parker, Michaela Reynolds, Jacy Sconce, Kourtney Seaton, Kamren Shelton, Michael Tierney, Dereje Tuli

Safeway: Mackenzie Gunn, Jennifer Nguyen

SOP Abilene: Jessica Honey

SOP Academic Excellence: Sheridan Crenshaw, Justin Hierholzer, Abigail Higginbotham, Alyssa Oakes

SOP Alumni Pioneers: Kamren Shelton

Stanley M. Reinhaus Family Foundation: Janelle Agolue, Gabriel Lopez, Stephen Ozomah, My Tang

Sybil B. Harrington: Adalee Alvarez, Chandler Batson, Gracie Bentley, Reagan Bills, Blayne Boyd, Cayley Crews, Duke Cullins, Justin Hierholzer, Darian Higgins, Katelyn Laminack, Whitlee LaRue, Taylor Le, Titus Lie, Brooke Noble, Alyssa Oakes, Michaela Reynolds, Kamryn Rogers, Rachel Zant

Tarrant County Pharmaceutical Association: Madeline Clague

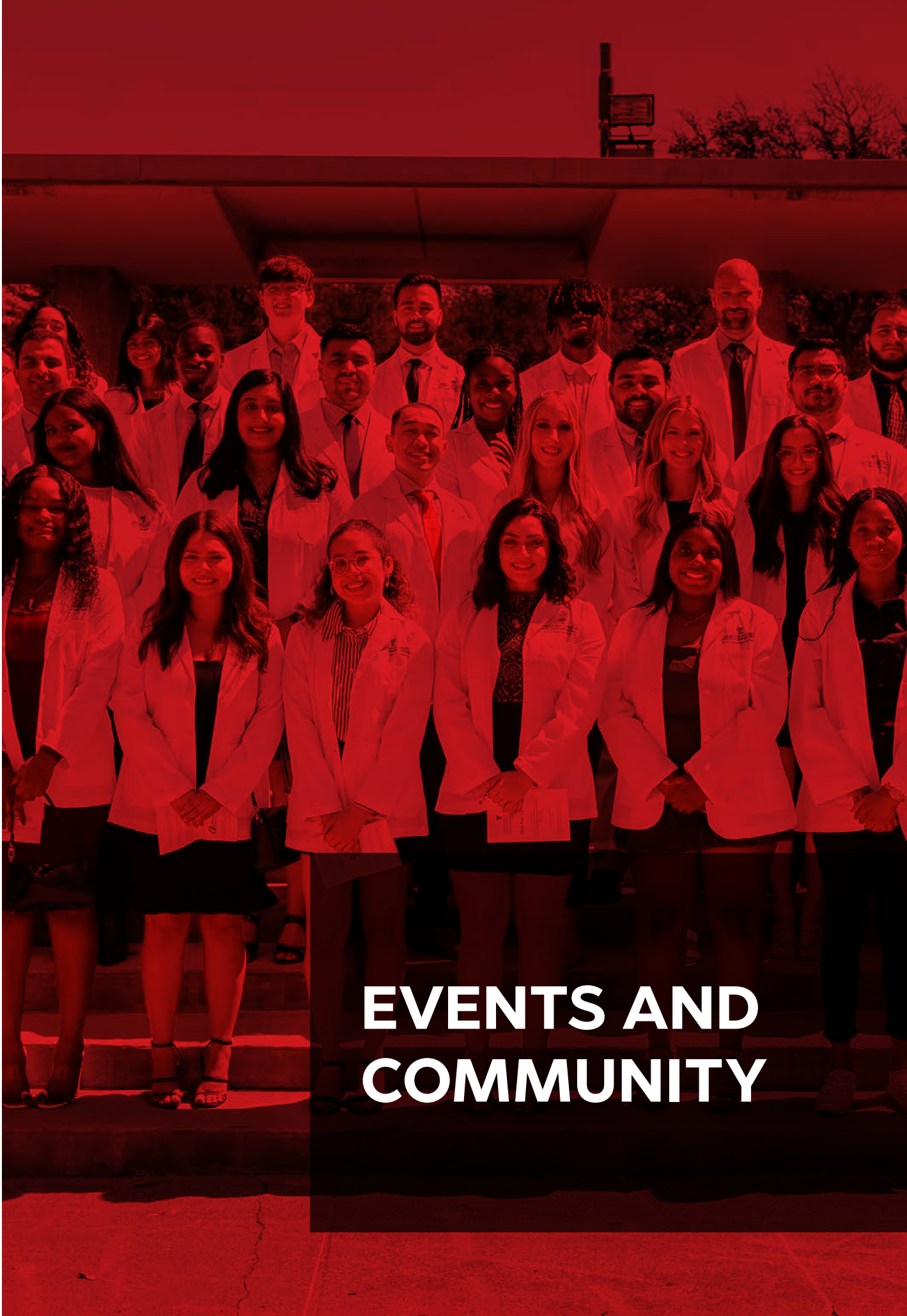
Turner: Norma Sanchez

Walgreens: Mackenzie Gunn, Jamie Nguyen

Wehner: Brayden Key

Willy I, Wanda and W.F. Martin: Amalia Akwar, Denise Anderson, Benjamin Baker, Logan Bishop, Jonathan Chacko, Cecily Elliott, Krishlene Fabia, Asia Fernandez, Daniel Flores, Joselyne Fraire, Danny Gil, Caleb Gray, Jake Hall, Abigail Higginbotham, Jessica Honey, Laura Johnson, Ashley Kelly, Conner Massenburg, Hannah Mays, Jordan Miller, Maxwell Moore, Oluwanbo Olarewaju, Ife Otukoya, Caylee Parker, Nirav Patel, Richard Riley, Jacy Sconce, Michelle Shisabilo, Taylor Stark, Abraham Stone, Andrea Strohl

West Texas Pharmacy Association: Kreed Averoff, Reagan Bills, Logan Bishop, Duke Collins, Paulina Cruz, Ashley Cummings, Shiva Azar Goshasb, Mackenzie Gunn, Jennifer Hale, Ekon Juarez, Dominic Mashburn, Asha Oommen, Connor Pearson, Maheen Polani, Jacy Sconce



EVENTS AND COMMUNITY



In August and September 2024, we welcomed the 119 students who make up the Class of 2028 with white coat ceremonies at the Dallas, Amarillo, and Abilene campuses — this included the inaugural cohort of Pioneer Pathway students. The annual events invited family members and friends to watch as the school's incoming students receive their traditional white pharmacy coats, sign the Pharmacist Code of Conduct and recite the Oath of a Pharmacist for the first time. For incoming students, receiving the white coat is a reminder of the commitment they are making to an honorable and trusted profession.



CAREER PREP SUMMER SERIES BRINGS ALUMNI AND STUDENTS TOGETHER

On July 17, TTUHSCSOP alumni and friends participated in a fellowship and industry prep session at the Dallas campus and via zoom with 16 students as part of the Career Prep summer series for P4 students. During the event, students were able to learn and receive advice from experienced pharmacists.



ANNUAL LEADERSHIP RETREAT BRINGS STUDENTS TOGETHER

In August, students from all four TTUHSCSOP campuses attended the annual student leadership retreat at the Dallas campus. The Disney themed retreat explored “A Whole New World...of Leadership” and taught students the basics of leadership and how to apply skills to professional interactions and activities. The event included a service project, team building exercises, breakout sessions, and opportunities to network and socialize.



TTUHSCSOP VISITS WALGREENS MICRO-FULFILLMENT CENTER



In August, 35 TTUHSCSOP faculty, staff, and students were part of two groups that visited the Walgreen's micro-fulfillment center, a specialty clinic and enjoyed a lunch and learn session.

ABILENE HOLDS ANNUAL RESEARCH SYMPOSIUM

In October, the seventh annual Abilene Interdisciplinary Symposium on Cancer and Biomedical Research was held at the Abilene campus. Ozgur Sahin, Ph.D., professor and endowed chair in the department of biochemistry & molecular biology and Hollings Cancer Center at Medical University of South Carolina was the keynote speaker. The event invites students, researchers and medical professionals from far and wide to come together to share their expertise and resources.



ABILENE HELPS TEACH HIGH SCHOOL STUDENTS ABOUT PHARMACY



In October, a group of about 70 students visited the TTUHSC Abilene campus for Healthcare Academy — a program of Hendrick Health that exposes Abilene area high school students to various health fields they may choose to pursue as careers someday. Students were able to learn about pharmacy and nursing during their visit.



STUDENTS PRESENT AT ASHP MIDYEAR

In December, a group of 33 students attended the 2024 American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting & Exhibition in New Orleans. Of those, 15 had the honor of presenting posters during the event.

ABILENE HOLDS RURAL HEALTH SYMPOSIUM



In December, TTUHSCSOP, TTUHSC School of Nursing and the Big Country Health Education Center invited local high school students to attend a Rural Health Symposium. Students in attendance learned about pharmacy, nursing and various other health professions available within West Texas.

AMARILLO, LUBBOCK PREPARE WITH DISASTER DAY



In March, TTUHSC Amarillo and Lubbock campuses held Disaster Day, an interprofessional emergency response simulation, events that allowed interprofessional teams of students to work together in realistic disaster response scenarios to diagnose, treat and care for standardized patients role-playing victims affected by the natural disaster.

Amarillo SOP students joined TTUHSC Schools of Medicine, Nursing, GSBS and the Texas Tech University School of Veterinary Medicine students for a simulated wildfire scenario similar to the one that burned close to TTUHSC in 2018.

Lubbock SOP students joined other TTUHSC Lubbock campus schools, Angelo State University students, Texas Tech University theater faculty and students and South Plains College EMS for a simulated tornado scenario.

AMARILLO HEALTHCARE CAREER DAY WELCOMES HIGH SCHOOL STUDENTS

TTUHSC welcomed 25 high school students to the Amarillo campus for the annual Healthcare Career Day, an event designed to help Panhandle area students explore careers in health care. With support from TTUHSC, the Amarillo Rotary Club and the Amarillo Women's Network, this event allowed students to learn about the educational paths available at TTUHSC. Faculty and students from the Texas Tech University Health Sciences Center Schools of Pharmacy, Nursing, Health Professions and Medicine shared their journeys and advice on pursuing a future in health care.





TOBIAS ORGANIZES TOUR OF ALCON LABS

Janika Tobias, P1 at the Dallas campus, worked with TTUHSCSOP's Industry Pharmacists Organization (IPhO) to coordinate a tour of Alcon Laboratories, Inc.—a pharmaceutical/medical device company that leads in ophthalmic products and devices. During the tour, 15 students were able to witness first-hand the marketing and manufacturing facilities, as well as the journey from raw materials to finished products.

AMARILLO HOSTS RESEARCH SYMPOSIUM

On April 11, more than 100 student and trainee researchers from TTUHSC Schools of Pharmacy, Medicine, Nursing and Health Professions presented research findings at the 2025 Student Research Day. The symposium highlighted the research accomplishments of students, residents and faculty in their respective fields of study with poster and oral presentations. Trainees showcased their research scholarship and projects.



ABILENE, AMARILLO HOST SUMMER CAMPS



In June the Abilene and Amarillo campuses hosted Rx Summer Camps for rising 9th-12th grade students interested in learning more about the pharmacy profession. The immersive camps served as STEM-driven college prep experiences with hands-on projects, laboratory activities, simulations, field trips and engaging presentations.



FACULTY RETREAT

In May, faculty members from all four campuses gathered at the Amarillo campus for a three-day retreat that was planned by the Faculty Development Committee. During the retreat, faculty took part in team building, development and training workshops, a service activity and finished the week with graduation ceremonies for the Class of 2025.



CLASS OF 2025 CELEBRATED

On May 17, the TTUHSCSOP Class of 2025 received their PharmD degrees at the Amarillo Civic Center Auditorium in front of a crowd of proud family and friends.

Of the 88 graduates who made up the class of 2025, 29 committed to residency programs, 1 was accepted into a fellowship program, 15 received Pharm.D./MBA dual degrees, and 6 received honors in research designations.

Alex Varkey, Pharm.D., current senior director of strategic accounts at Visante, and past president of APhA, delivered an inspiring commencement address and Afsana Musaroff was named the 2025 Banner Bearer—the graduate with the highest four-year grade point average.



SERVICE



MEDICATION CLEANOUTS BENEFIT TTUHSC COMMUNITIES AND STUDENTS

During the 2024-2025 school year, the Texas Panhandle Poison Center (TPPC), managed by the TTUHSC-SOP, hosted six Medication Cleanout™ events in Abilene, Amarillo and Lubbock. The biannual collections provide residents a free way to safely dispose of unwanted and unused medications in an environmentally conscious manner.

The six collections yielded impressive results, with thousands of cars showing up to dispose of the following amounts for each event:

Fall

- Abilene: 1229 pounds of unused or expired medication and 160 pounds of sharps.
- Lubbock: 617 pounds of unused or expired medication and 137.5 pounds of sharps.
- Amarillo: 1226 pounds of unused or expired medication and 294.5 pounds of sharps.

Spring

- Abilene: 847.5 pounds of unused or expired medication and 195 pounds of sharps.
- Lubbock: 1189 pounds of unused or expired medication and 261.5 pounds of sharps.
- Amarillo: 1106 pounds of unused or expired medication and 162 pounds of sharps.

The program helps the TPPC take a proactive approach to safeguarding communities by providing a convenient and legal way for people to dispose of medications, as well as providing disposal services for syringes and sharps.

TPPC conducts these events with the help of TTUHSC students and other volunteers who help with critical services like collecting medications, deidentifying bottles, sorting and identifying medications and more. The events serve as a great opportunity for pharmacy students to collaborate with students from other TTUHSC schools and see first-hand the issues with non-adherence to medications.

STUDENTS VOLUNTEER AT STORYBRIDGE LIVE

On October 5, TTUHSCSOP students and the Graduate Student Association in Amarillo joined Texas Tech Physicians Pediatrics team members for a wonderful day of volunteering at Storybridge Live. We were proud to support the mission of Storybridge as it works to ensure that all kids in the region have access to an at-home library of age-appropriate books.



STUDENTS HOLD BLOOD STEM CELL SWAB DRIVE EVENTS



In February, the American Pharmacists Association Academy of Student Pharmacists (APhA-ASP) chapter in Amarillo partnered with Earl Young's Team to bring two blood stem cell swab drive events to the Amarillo campus. Drives like these help to save lives and raise awareness about the critical need for blood stem cell/bone marrow donors.

STUDENTS SERVE AS JUDGES AT LOCAL SCIENCE FAIR

In February, students at the Abilene campus served as judges for the local St. John's Episcopal School Science Fair. This is the sixth consecutive year our students have judged the event.





DALLAS STUDENTS HELP WITH MEDICATION TAKE BACK

In April, our Dallas campus students partnered with local police to help with the DEA National Medication Take Back Day at three different sites in Arlington. The event aimed to make communities safer and healthier by removing unneeded medications from the community.

TRADITION CONTINUES AT CAMP NEW DAY

Each year, School of Pharmacy faculty and students volunteer two weeks of their summer at Camp New Day, a non-profit summer camp for children with diabetes affiliated with the Diabetes Foundation of the High Plains.

Thomas Parker, Pharm.D., Assistant Professor of Pharmacy Practice in the Pediatrics Division, took over as co-director of the camp when it was going to be ended in 2009. With the help of Sue Rankin, NP, and many others, he was able to continue to provide a safe place for area children with diabetes to have a summer camp experience.



During camp, each of the 40-60 volunteers serves in the role of medical staff/cabin counselor. They are with their campers 24/7, perform counselor duties like participating in activities with the campers, and assist them with their medical needs like glucose testing, insulin injections and medications, helping with carbohydrate counting and dose calculations at meal time, overnight monitoring and reinforcing proper diabetes management techniques.

HEALTH FAIRS AND COMMUNITY CLINICS



On July 20th, Dallas campus pharmacy students and UTSW medical students teamed up to start monthly diabetes workshops at Brother Bill's Helping Hands. During the first session, students provided education on what diabetes is, risk factors, symptoms, how it is diagnosed, how to check blood sugar and treat low blood sugar.



On August 3rd, students at the Dallas campus provided health screenings and education about medication safety for homeless women and children at the first Union Gospel Mission Pediatric Health Fair.



In August, Dallas campus pharmacy and UTSW Medical and Dietician students collaborated on the second session of the Diabetes Workshop at Brother Bill's Helping Hand. This session was focused on nutrition with students providing education on how different foods and drinks affect people with diabetes and how to make healthier choices. There was also a cooking demonstration where participants received recipes, spices, and information about the free produce days at Brother Bill's.



On September 21st, several Dallas campus pharmacy students had the opportunity to participate in and coordinate a booth at the Legacy Preparatory Charter Academy Health Fair. During the event, our students offered vital blood pressure and blood sugar screenings to community members and kids enjoyed emulsion discussions and hands on slime demonstrations.



In partnership with Parkland Health, TTUHSC members of the Student National Pharmaceutical Association (SNPhA) and Student Pediatric Pharmacy Association (SPPA) volunteered at the 7th Day Adventist Church North Dallas Spanish Health Fair twice during the Fall semester. Students provided screening and counseling on hypertension and diabetes and pediatric asthma education services to the Dallas underserved community.



Student National Pharmaceutical Association (SNPhA) members participated in the Community Mental Health Fair organized by the Lunch Box of Love Organization. Student volunteers provided health screenings and hypertension and diabetes education to residents at Clayton's Mark Community in Grand Prairie.



During the fall semester, students at the Dallas campus teamed up with UTSW medical students and Chamberlain nursing students to provide 70 influenza vaccines and education to Dallas community members at Brother Bill's Helping Hands.



In November, TTUHSC Student National Pharmaceutical Association (SNPhA) members participated in a Resource Fair organized by Dallas Hope Charities as part of their Hunger and Homelessness Awareness Week. During the event, student volunteers provided diabetes and hypertension screenings and education to attendees in need.



On October 12th, the Abilene Chamber of Commerce Hispanic Business Council hosted the annual Mercado Business Fair. During the event, TTUHSCSOP and TTUHSC School of Nursing students conducted blood pressure checks and glucose screenings for community members in need.



On March 29th, Student National Pharmaceutical Association (SNPhA) members extended their outreach to the community by being a part of the 4th Annual Living My Best Healthy Life Health Fair hosted by Frazier Revitalization. Dallas campus students helped provide diabetes and hypertension screenings along with education on healthy lifestyle management to attendees.



In April, TTUHSC pharmacy students volunteered at the Society of St. Vincent de Paul North Texas Charitable Pharmacy. During the event, students conducted blood pressure checks and lipid screenings to the Vickery Meadow neighborhood in Dallas.



ALUMNI

TWO SOP ALUMNI HONORED AT DISTINGUISHED ALUMNI AWARDS



In October, the TTUHSC Alumni Association held the 2023-2024 Distinguished Alumni Awards dinner in Lubbock. Two School of Pharmacy alumni were honored at the event, which recognizes alumni who have achieved a high level of success in their chosen fields or whose efforts have made a positive impact on community or humanity, bringing distinction to themselves and to TTUHSC.

Randy Martin, Pharm.D., MHA, received the Pharmacy Leadership Award. Martin earned his Doctor of Pharmacy in 2009 and is currently the clinical pharmacy manager at Texas Health Harris Methodist Fort Worth Hospital, an 860-bed community teaching hospital. In his role, Dr. Martin leads the clinical pharmacy program at Harris Methodist, including critical care, emergency medicine, acute care, and academic medicine teams. In addition, he provides oversight for an expanding pharmacy residency and student academic program. Dr. Martin holds a faculty appointment as an Associate Professor of Medical Education at Texas Christian University. He is nationally recognized as an expert in medication safety and has been consulted on numerous high profile medication error cases across the country.

Prior to his current role, Dr. Martin served as Director of Pharmacy, Innovation, and Ambulatory Clinics at Texas Health Harris Methodist Alliance Hospital and Associate Dean for Clinical Affairs at University of North Texas Health Science Center.

Dr. Martin has dedicated his career to professional service. He currently serves as a commissioned member of the Texas State Board of Pharmacy. He is a former President of the Texas Society of Health-System Pharmacists and previously served on the Texas Pharmacy Congress and American Society of Health-System Pharmacists House of Delegates. He is a Fellow of the American Society of Health-System Pharmacists and a past recipient of Texas Society of Health System Pharmacists' Innovative Collaborative Practice Award and Larry P. Nesmith Pharmacist Recognition Award.

Jamie McCarrell, Pharm.D., MBA, BCPS, BCGP, FASCP, received the Excellence in Practice Award. Dr. McCarrell is a 2009 graduate of the TTUHSC School of Pharmacy and he completed a PGY-1&2 Pharmacotherapy Residency at TTUHSC in 2011. After residency, Dr. McCarrell joined the faculty at TTUHSC in the geriatrics department, earning his dual board certification as a pharmacotherapy specialist and geriatric pharmacist. He dedicated the next decade of his career to passionately teaching future pharmacists, winning several awards including Preceptor of the Year and Faculty of the Year. He organized and chaperoned multiple medical mission trips to South America with the students of TTUHSC and served as faculty advisor for FIMRC, Faculty Secretary, as well as many other influential positions. During his years at TTUHSC, Dr. McCarrell practiced in a PACE facility, serving as the sole provider of pharmacy services to vulnerable older adults in the program. His practice focused on disease state management, geriatric psychiatry, and pharmacotherapy optimization.

In the early stages of COVID, Dr. McCarrell had the opportunity to serve his community in hospital leadership and transitioned into private practice. His leadership led to the sole source of monoclonal antibody administration in the Texas Panhandle and expanded immunization efforts as well. He is blessed to work with an amazing team of pharmacists and technicians at BSA Hospital in Amarillo, Texas, where he and his team strive to lead the profession in innovation and clinical practice.

ALL IN THE FAMILY: A PHARMACY HERITAGE



The Thompsons are a family united by a shared passion for pharmacy, health care and a deep connection to TTUHSC.

Inspired by their mother's dedication yet driven by their own aspirations, Aaron Thompson, PharmD, (Pharmacy '15) and Jordan Thompson, PharmD, (Pharmacy '19), and her daughter, Sarah Wilson, DPT, (Physical Therapy '20) followed in her footsteps to serve in health care, each enjoying their student life in the same camper she lived in.

Suzanne Thompson, PharmD, (Pharmacy '04) never imagined the legacy she was building for her children when she started her journey at TTUHSC while raising her three young children. In 1989, the family moved to Seminole, Texas, and Suzanne was a substitute teacher for Seminole ISD, until she was accepted into the program. Seminole was 203 miles south of TTUHSC's newly opened pharmacy school in Amarillo. Suzanne would drive up on the weekdays, stay in a camper and come home on the weekends. Although she had to sacrifice special moments, Suzanne set the course for her children's future.

"My very first day of classes was the first day of kindergarten for my youngest, Jordan. Needless to say, I was not happy to be in Amarillo at that time, missing that," Suzanne said. In balancing motherhood and a rigorous course load, Suzanne persevered and earned her pharmacy degree.

Before her current role at United Pharmacy in Lubbock, Texas, she worked at an independent pharmacy in Seminole for 13 years.

While in school, Jordan met his wife, Jeni, who was also pursuing her pharmacy degree. They got married and then graduated together in 2019. Jordan started his career working for United Pharmacy and now works at Grace Surgical Hospital in Lubbock. Jeni Thompson, PharmD, (Pharmacy '19) works for University Medical Center in Lubbock.

"(Health care is) usually where our dinner conversations turn, and now my husband (Danny Thompson) is used to it," Suzanne jokes. "He may even see an advertisement on TV for a certain drug and ask about it."

She credits her husband and their partnership for helping her get through those four years and ultimately for getting their family to where they are today — making their mark on health care, forever grateful for the opportunities TTUHSC afforded them and the connections it forged.

FINDING FOCUS



Alexandria Arnett, Pharm.D., Class of 2025, will tell anyone she always felt like she had a zoo at home. Her pets — past and present — include a fish, frogs, geckos, gerbils and a snake. Even on Zoom calls, her cat, Nala, makes appearances, crawling in front of the camera.

So, it would seem natural that Arnett would land within some realm of the veterinary spectrum. In reality, it took a lot of time and several relocations to realize that she wanted to work around animals.

She is even responsible for chartering the TTUHSC American College of Veterinary Pharmacists student chapter. In May 2024, she finished her term as the student pharmacist board member, a position she earned over applicants from across the country.

“It’s really just exciting to look at it as you’re going one step forward in a direction that you believe in,” Arnett said. “And you’re advocating for something that you believe has a huge potential for all future pharmacists.”

For the San Diego, California, native, this is her second stint in higher education. After high school, she went to the University of Texas at San Antonio but dropped out after one year and returned to San Diego.

While there, she learned about a pharmacy technician program through CVS and found she loved working with patients. She joined a local community college, passed her classes and then started the process of finishing her degree in Texas. After some student and faculty interviews, she decided TTUHSC was right for her.

“I realized (college) wasn’t just because I wasn’t capable; it’s because of that time in my life,” Arnett said. “When I was 18, I wasn’t focused.”

Now, her focus is spreading the message of why veterinary pharmacy could give an added boost to all of her peers. She talks to students in other pharmaceutical programs around the country. She speaks on podcasts about how veterinary pharmacy can add to one’s educational experience and her role with the pharmacist board.

“I just started diving deeper and deeper, and now I’m here today,” Arnett said. “I have all these resources for future pharmacists who want to look into this field.”

ONTO THE NEXT ONE



The joke among friends is that Traylor Moses, PharmD, MPH, MSMP, MBA, Class of 2024, has more degrees than a thermometer. As he pursues a second year of residency, specializing in oncology pharmacy, he is considering a Master of Health Administration – but no promises yet. All of this serves the ultimate goal of directing a cancer center somewhere in the U.S.

“I loved the science behind it all, but I’m extremely extroverted, so being in a lab all day wasn’t as appealing as actual patient interaction, so (I decided) pharmacy was the best way for me to do that,” he says.

SERVING THE UNDERSERVED



Vegetables grown in a garden and a keychain from a trip to New York — these are a couple of the gifts Katie Steele, PharmD, Class of 2015, received from her patients while working as an ambulatory care pharmacist at Virginia Garcia Memorial Health Center in Hillsboro, Oregon. With fewer time restrictions than in a typical clinic, Steele could see patients there more frequently and for longer durations.

As those relationships grew, so did the extent of her care. Steele also helped patients with concerns outside the clinic, like not having a refrigerator to store insulin or struggling to read mail written in English.

“As a pharmacist, it’s not just about what am I trained to do,” Steele says, “but where are the needs of my community, and how can I help fill that?”

After she completes her first year of lectures, she plans to expand clinical pharmacy services similar to the one she established in Hillsboro seven years ago, hoping to help the underserved population again.

THE 2024-2025 TTUHSC SCHOOL OF PHARMACY ALUMNI BOARD



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FACILITIES



LUBBOCK LIBRARY RENOVATION COMPLETED

In October, TTUHSC university leadership and students celebrated the newly renovated third floor of the Preston Smith Library in Lubbock. The project, which began in February 2024, reconfigured the entire third floor of 29,837 GSF to include: student study rooms and open study spaces with new furniture; lobby vending area; a tranquility room; and full renovation of the restrooms.

AMARILLO AND DALLAS CAMPUS UPDATES

Over the last year, the Amarillo campus has received updates to several areas. The educational technology and branding renovations to SOP Classroom 210 were completed, SOP Classroom 336 got a branded art wall, SOP 105 Study Room got new monitors and Solstice technology, and the entire campus had interior security cameras installed. Meanwhile, the Dallas campus had a new HVAC system installed on the 4th floor and the issues with elevator 3 were fixed.



TTUHSC

THE FUTURE BELONGS TO *all of us*



TTUHSC NAMED A 2024 GREAT COLLEGE TO WORK FOR®

TTUHSC was again named one of the best colleges in the U.S. to work for, with special designation as an “Honor Roll” institution, according to a recent survey by The Great Colleges to Work For® program.

The results were released on September 20th at GreatCollegesList.com and in a special insert in The Chronicle of Higher Education.

The results are based on a survey of 216 colleges and universities. In all, 75 of those institutions received “Great College to Work For®” recognition for specific best practices and policies. TTUHSC also was named to the Great Colleges Honor Roll, a status granted to only 42 institutions for standing out in their size categories. This marks the third consecutive year

TTUHSC earned the Honor Roll designation.

Results are reported for small, medium and large institutions, with TTUHSC included among the medium universities.

TTUHSC won honors in five categories this year:

- Job satisfaction and support
- Compensation and benefits
- Professional development
- Shared governance
- Faculty experience

“We are committed to fostering an exceptional work environment comprised of individuals who embody our core values, and the Great Colleges to Work For® recognition reflects this,” TTUHSC President Lori Rice-Spearman, Ph.D., said. “Each team member plays a vital role in fulfilling our commitment to improving access to care across our great state and impacting the future of health.”

With six schools and more than 3,500 full-time team members, TTUHSC graduates more health care professionals than any other health-related institution in the state. The university’s impact is seen in its service region, nationwide and throughout the world, with a trajectory of growth that distinguishes itself through academics, service and research. TTUHSC has been nationally recognized for its innovative programs, academic achievement and innovation. The institution achieved Carnegie Classification® status for Special Focus Four-Year Research Institutions in 2022 and is a recognized Hispanic-Serving Institution by the U.S. Department of Education.

The survey results are based on a two-part assessment process: an institution questionnaire that captured employment data and workplace policies from each institution, and a survey administered to faculty, administrators and professional support staff. The primary factor in deciding whether an institution received recognition was employee feedback.

The Great Colleges to Work For® program is one of the largest and most respected workplace-recognition programs in the country. For more information and to view all current and previous recognized institutions, visit the Great Colleges program website at GreatCollegesProgram.com and GreatCollegesList.com. ModernThink, a strategic human capital consulting firm, administered the survey and analyzed the results.



TTUHSC AND TTUHSC EL PASO NAMED TO NAI TOP 100

On April 17, for the third consecutive year, the National Academy of Inventors (NAI) ranked the Texas Tech University System (TTU System) among the Top 100 U.S. Universities Granted Utility Patents for 2024. The TTU System, which includes Texas Tech University Health Sciences Center (TTUHSC) and TTUHSC El Paso, ranked 75th.

The NAI created the Top 100 U.S. Universities Granted Utility Patents list to highlight and celebrate U.S. academic institutions that play a large role in advancing innovation through the critical step of securing their intellectual property through patents. This enables and empowers researchers to translate their inventions, bringing important technologies to the marketplace, bolstering the economy and creating tangible societal solutions.

In 2024, the TTU System was granted 25 patents. Of the issued patents, TTUHSC and TTUHSC El Paso researchers contributed to seven.

“Being listed on this ranking once again by the National Academy of Inventors underscores the incredible work happening across the Texas Tech University System—to be recognized multiple years in a row is a testament to the vibrant and supportive research environment we have cultivated on our campuses,” said Tedd L. Mitchell, M.D., chancellor of the TTU System. “It showcases the remarkable talent, drive and ground-breaking spirit that exists among our people. Above all, it’s proof that our researchers at Texas Tech University Health Sciences Center and Texas Tech University Health Sciences Center El Paso are committed to pushing boundaries and turning innovative ideas into tangible solutions that impact real lives.”

Lance R. McMahon, Ph.D., TTUHSC executive vice president for research and innovation, said these latest rankings demonstrate the commitment of both TTU System health sciences centers to translate their discoveries into health care innovations.

“Our sustained, 3-year rise in the NAI rankings is clear evidence of the global impact of our scientists and supporting staff, including the Office of Research Commercialization team led by Cameron Smith,” McMahon said.

McMahon credited the increased metrics and Top 100 ranking to the faculty inventors, the support of their department chairs and school deans and the enabling efforts of the TTUHSC Office of Research and Innovation.

“This is incredibly exciting and highlights the innovation our researchers bring to help enhance the health and care of the lives of the people residing in the Borderplex and beyond,” TTUHSC El Paso Vice President for Research Deborah Clegg, Ph.D., said.

NAI compiles its calendar-year Top 100 lists using data provided by the United States Patent and Trademark Office. Top 100 placement includes all named assignees listed on the patent. This newest list is meant to provide a more focused view of the national innovation landscape and the contributions made by U.S. academic institutions.

To view the entire list of NAI’s Top U.S. Universities Granted Utility Patents in 2024, visit the NAI Top 100 webpage.

The TTU System is one of the top public university systems in the nation, providing exceptional academic offerings and world-class research and innovation. Comprising three academic universities and two health-related institutions, the TTU System includes Texas Tech University, Texas Tech University Health Sciences Center, Angelo State University, Texas Tech University Health Sciences Center El Paso and Midwestern State University. The system is one of only nine in the nation to offer programs in undergraduate, medical, law, nursing, pharmacy, dental and veterinary education.



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