



TEXAS A&M UNIVERSITY

Irma Lerma Rangel

School of Pharmacy



TEXAS A&M UNIVERSITY IRMA LERMA RANGEL SCHOOL OF PHARMACY  
DEPARTMENT OF PHARMACY PRACTICE  
**ANNUAL REPORT - 2021**

## OUR MISSION

We develop future pharmacy leaders and advance health through innovation and compassionate care.

## OUR VISION

To be leaders and innovators in the advancement of health, patient care, pharmacy education, and research.

## Department of Pharmacy Practice



George Udeani, PharmD, DSc, FCP, FCCP  
 Clinical Professor and Department Head of Pharmacy Practice



Rachel Garza  
 Executive Assistant I



Maria C. Benavides, CPhT  
 Pharmacy Practice Assistant



Joy Alonzo, ME, PharmD  
 Clinical Assistant Professor



Fatima Alshbool, PharmD, PhD  
 Assistant Professor



Asim Abu-Baker, PharmD  
 Clinical Professor and Associate Dean for Clinical and Professional Affairs



Daniela Z. Bazan, PharmD, BCPS  
 Clinical Assistant Professor



Mark A. Bremick, BS, Pharm  
 Instructional Assistant Professor



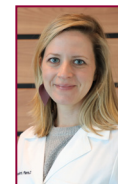
Juan F. Castro, MD, MBA  
 Clinical Assistant Professor



Annette DeSantiago, PharmD  
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Joan Everett-Houser, PharmD, EdD  
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Charlotte Farris, PharmD, BCPS  
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Stephen "Eric" Grayson, PharmD  
 Clinical Assistant Professor



Heather Hay, PharmD, BCPS, BCACP, CD  
 Clinical Assistant Professor



Trager Hintze, PharmD  
 Clinical Assistant Professor



Michael Allen Horseman, PharmD  
 Clinical Associate Professor



Robert W. Hutchison, PharmD  
 Clinical Associate Professor



Delaney Ivy, PharmD, MSc, BCPS, CDE  
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Merlyn Joseph, PharmD  
 Clinical Assistant Professor



Henri R. Manasse, Jr., PhD  
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Anne-Cécile Mingle, PharmD, MEd  
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Andrea Mora, PharmD  
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Frank North, PharmD, MPA  
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Theresa Ofili, PharmD, MPH  
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Pooja Patel, PharmD  
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Victoria B. Pho, PharmD, BS, BCGP  
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Sohail Rao, MD, MA, DPhil  
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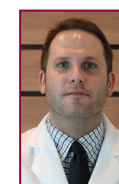
Sara Rogers, PharmD, BCPS  
 Clinical Assistant Professor



Nephy G. Samuel, PharmD, BCPS  
 Clinical Assistant Professor



Salim R. Surani, MD, MPH, MSHM, FACP, FCCP, FAASM  
 Adjunct Clinical Professor



Andrew S. Tenpas, PharmD, RPh  
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Rene Verdusco, PharmD, BCPS  
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Jaye S. Weston, PharmD, MS, RPh  
 Clinical Assistant Professor

## Letter from the Department Head

2021 was another challenging year globally, as the world was immersed in a pandemic (COVID-19) unlike any other pandemic in a century. Given these challenges, our faculty effectively responded on multiple fronts and continued to uphold our core values, mission, and vision. In December 2020, the Food and Drug Administration granted Emergency Use Authorization for two vaccines. Thus, our faculty and students returned from Christmas break to hold mass vaccine clinics, vaccinating thousands of Texans and most of the staff, faculty, and administrators of the Texas A&M Health Science Center (HSC). We are indebted to the efforts of these faculty and students who worked tirelessly in immunizing hundreds of Texans, mitigating morbidity and mortality in an already overburdened health care system. Despite these efforts, our nation lost over 460,000 individuals to the pandemic in 2021; we express our heartfelt condolences to the families and loved ones of these individuals.



On the research front, the Department continued clinical trials on the BCG Vaccine for Health Care Workers as Defense Against COVID 19 (BADAS), in collaboration with the School of Medicine, Harvard University, Baylor College of Medicine, Cedars Sinai Medical Center, and MD Anderson. This research was supported through the Texas A&M Chancellor's Research Initiative for \$2,500,000. The Department collaborated with other HSC investigators in another COVID-19 clinical trial funded for \$2,200,000 by the National Institutes of Allergy and Infectious Diseases – National Institutes of Health. This study is titled: A randomized controlled study to assess SARS CoV-2 infection, viral shedding, and subsequent potential transmission in university students immunized with Moderna COVID-19 Vaccine. Of the 44 centers participating in this multicenter trial, we ranked first in enrollments, enrolling 25% of the over 1900 participants in the study.

On other fronts, we engaged in program expansion and welcomed new faculty and residents. We launched new programs at Texas A&M Health Family Care, Bryan, in precision medicine, and at HealthPoint, Bryan, and McAllen VA Clinic in ambulatory care. At St. Joseph Health, Bryan, we recruited a Residency Program Director and a clinical specialist in emergency medicine.

We launched a Postgraduate Year-One (PGY1) residency, at St. Joseph Health, with an inaugural class of three residents. The Department continued working on the strategic plan and recommendations from the retreat, focusing on research and workload activities.

In outreach, we were involved in Operation Health and Wellness, where our faculty and students provided pharmaceutical care to the medically underserved in Nueces County, and Operation Lone Star in the Rio Grande Valley. Via the 9th Annual Gulf Coast Multidisciplinary Pharmacotherapy Conference, we provided interprofessional continuing education programs to nurses, pharmacists, and physicians.

In the Diversity Equity and Inclusion space, we were involved with the Deans CARE (Deans Committed to Anti-Racism Efforts), a new initiative launched by the Council of Deans to actively support Texas A&M University's steady progress toward creating a vibrant climate for diversity, equity, and inclusion.

Despite all the challenges with the COVID-19 pandemic, our faculty and staff worked diligently and were prepared for in-person classroom education in the Fall.

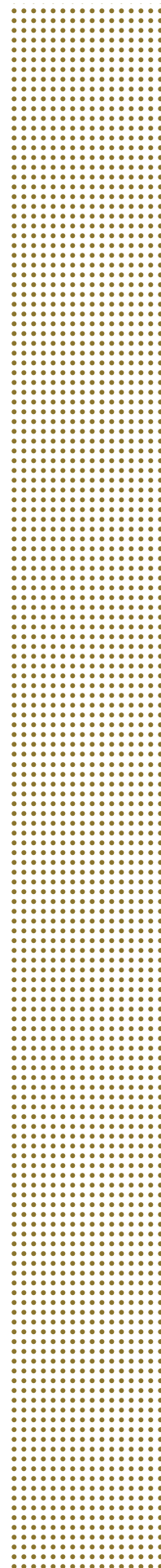
November 1, 2021, was a sad day for the Department, as we learned of the passing of Professor Mark Bremick after a prolonged illness. Professor Bremick was a passionate educator who cared immensely for his students and their

success. He was loved by all here at the School and will be remembered here for years for his pedagogic and other contributions.

We highlight the remarkable productivity of our faculty in practice and teaching in this report. Additionally, faculty productivity in awards, research, publications were commendable and presented within this report. We concluded the year with another successful retreat, and came up with several recommendations that will keep us busy for 2022.

I look forward to another successful year.

George Udeani, PharmD, DSc, FCP, FCCP  
 Head and Clinical Professor



## Teaching Achievements



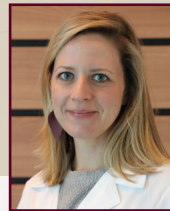
**Teacher of the Year (2021)**

Dr. Andrea Mora,  
P3 class



**Faculty Preceptor of the Year (2021)**

Heather Hay, PharmD, Clinical Assistant Professor



**Teaching Team of the Year IPT I: Electrolytes, Acid-Base, Anemia, and Kidney Diseases (2021)**

Pictured left to right: Course Coordinator:  
Charlotte Farris, PharmD, BCPS  
Instructor: Merlyn Joseph, PharmD

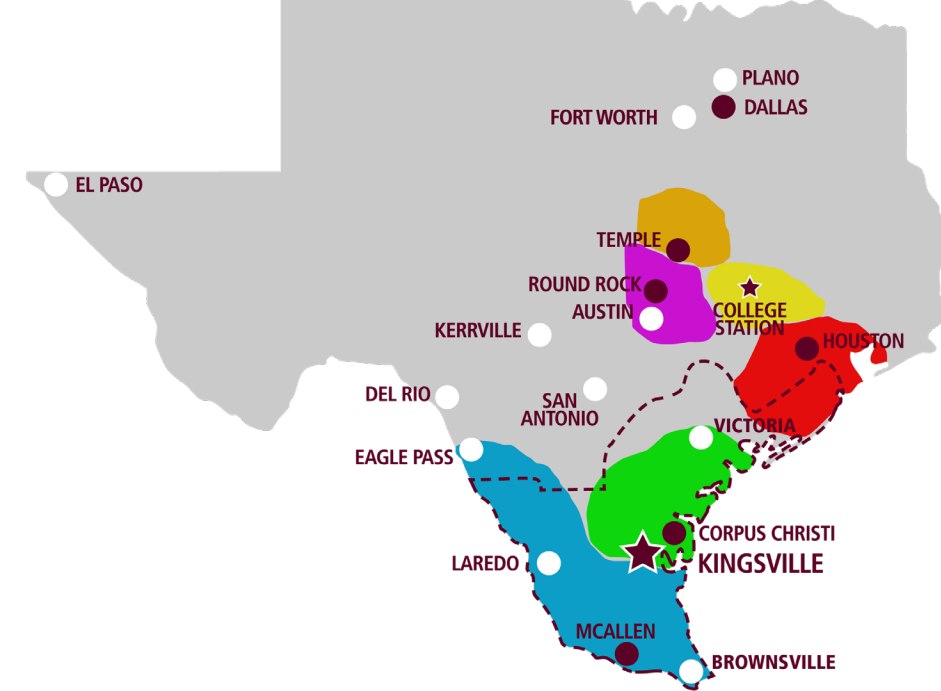


**Teaching Team of the Year IPT VII: Infectious Diseases (2021)**

Pictured left to right: Course Coordinators: Andrea Mora, PharmD and Simi Gunaseelan, PhD  
Instructors: Hamed Aly-Ismael, PhD, Michael Horseman, PharmD, Ladan Panahi, PharmD and Jaye Weston, PharmD, MS

## Pharmacy Service

Clinical pharmacy services at the Rangel School of Pharmacy impact patients and institutions throughout Central and South Texas:



### PARTNERSHIPS:

- Ascension Seton Williamson
- Baylor Scott & White Healthcare Georgetown Clinic
- Baylor Scott & White Hospital Temple
- CHI St. Joseph Health Regional Hospital
- Coastal Bend Health Education Center
- Doctor's Hospital at Renaissance
- FE Medical Services PLLC
- Health for All
- HealthPoint – Bryan/College Station
- Houston Methodist West Hospital
- Memorial Hermann - Texas Medical Center
- PAM Rehabilitation Hospital at Corpus Christi
- Sacred Health Community Clinic
- San Jose Clinic
- Texas A&M Health Family Care, Bryan
- Valley Baptist Hospital
- VA Texas Valley Health Care

**4,417**  
DOCUMENTED INTERVENTIONS  
FROM AMBULATORY CARE  
FACULTY

**23,297**  
DOCUMENTED INTERVENTIONS  
FROM ACUTE CARE FACULTY

**255**  
APPE AND IPPE  
STUDENTS PRECEPTED

**18**  
PGY1 RESIDENTS PRECEPTED

**3**  
PGY2 RESIDENTS PRECEPTED

**1**  
VETERINARY MEDICINE  
RESIDENT PRECEPTED

## Service Highlights

### DR. KIM TANZER

During the 2020-21 academic year, Dr. Tanzer served on several American Association of Colleges of Pharmacy (AACCP) committees. She served as chair of the AACCP Experiential Education section, as well as serving as chair for the Master Preceptor Recognition Awards Committee. Dr. Tanzer also served as an Abstract Reviewer for the AACCP Annual Meeting. Dr. Tanzer continues to serve as an Accreditation Council for Pharmacy Education (ACPE) site team visit member, participating in two site visits this academic year. In March of 2021, she was appointed to the National Association of Boards of Pharmacy (NABP) Advisory Committee on Exams (ACE), to begin a 3-year term. She is also completing a 3-year term on the NABP Committee on Law Enforcement and Legislation, which ends in 2023.



### DR. DANIELA BAZAN, DR. RENE VERDUZCO AND DHR HEALTH

From December 2020 through May 2021, Texas A&M Rangel School of Pharmacy faculty members Drs. Bazan and Verduzco participated alongside our pharmacy students in the COVID-19 Vaccination Program at DHR Health. DHR Health is located in Edinburg, Texas and was selected as a vaccination hub by the United States government for COVID-19 vaccine distribution. During the height of the pandemic, the Rio Grande Valley was a severely affected region. Resources were limited and pharmacy faculty and TAMU PharmD students stepped in to help immunize the local community. Pharmacy students and faculty participated in vaccine preparation and distribution, vaccination administration to patients, and vaccine education. This often-included twelve-hour days six days a week. To date, DHR Health has administered approximately 300,000 COVID-19 vaccines to South Texas residents.



### DRS. JOY ALONZO, JUAN CASTRO, MICHAEL HORSEMAN, FRANK NORTH, AND GEORGE UDEANI

Operation Health and Wellness took place in Nueces County from June 15-24, 2021. Operation Health and Wellness is supported by Nueces County, Texas A&M Colonias Program, US Army – Innovative Training Readiness (IRT) Program, Texas A&M Health Science Center, Texas A&M School of Pharmacy, and several local stakeholders. This program is geared towards bringing free medical assistance to the medically underserved in Nueces County. In addition to pharmacy services, general checkups, physical exams, eye care, dental services and mental health services were made available. There were six locations, (5 human service locations and 1 offering veterinarian services). Collectively, 2,538 residents across the 5 clinic sites – Banquete, Bishop, Calderon, New Jerusalem, and Petronila – were impacted over the 9-day operation. There were approximately 19,000-unit doses of medications dispensed by Pharmacy Practice Faculty in Collaboration with US Army pharmacy technicians. The US Army announced that event will be scheduled for 2022, given the success of the program in 2021.



## Thriving Through COVID-19

### BY DR. ASIM ABU-BAKER, ASSOCIATE DEAN FOR CLINICAL AND PROFESSIONAL AFFAIRS

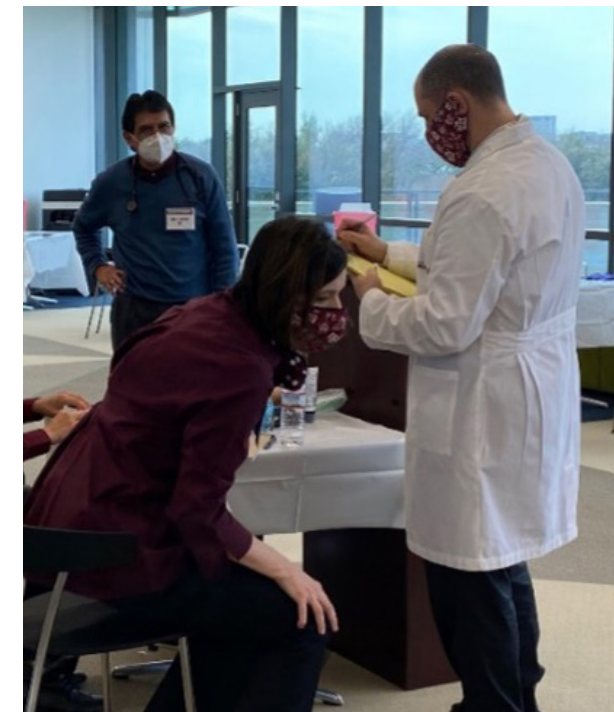
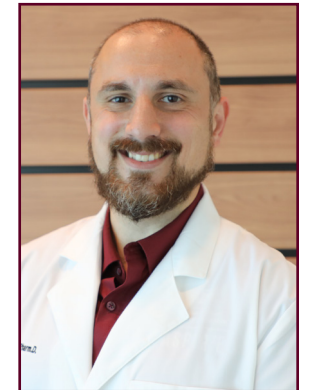
In 2021, the Rangel School of Pharmacy actively participated in the struggle against COVID-19. In response, we adopted policies and procedures to maintain School operations and keep everyone safe. Our curriculum delivery continued with a lot of innovation and perseverance by our faculty, staff, and students in the face of the COVID-19 Pandemic. Most notably, the School of Pharmacy stepped up to lead the effort to vaccinate the faculty and students of Texas A&M Health Science Center.

Late in 2020, the School of Pharmacy Vaccination Task Force was formed and included: Dr. Asim Abu-Baker, Dr. Joy Alonzo, Mrs. Lynde Buras, Dr. Juan Castro, Dr. Andrea Mora, Mrs. Agatha Alonso, and Ms. Denise Hornsby. This group began the effort in collaboration with Fe Medical Services of Corpus Christi, for the School to begin receiving COVID-19 vaccines from the Texas Department of State Health Services for administration to health professionals and high-risk patients.

A large number of our students and faculty worked collaboratively with Texas A&M Health Science Center to provide ten COVID-19 Vaccination Clinics across the state to faculty and students in the School of Medicine, School of Nursing, and School of Dentistry. This effort resulted in the School of Pharmacy holding clinics in College Station, Kingsville, Corpus Christi, and Dallas administering 2,590 doses to Texas A&M Health Science Center faculty, staff, and students.

With the height of the COVID-19 pandemic behind us, we are proud of our school community's ability to come together and exemplify the Texas A&M Core Values:

EXCELLENCE | INTEGRITY | LEADERSHIP | LOYALTY | RESPECT | SELFLESS SERVICE



# Scholarly Achievements 2021

## PEER-REVIEWED PUBLICATIONS

### Joy Alonzo

Hernandez, Jose, Zhong, Lixian, Alonzo, Joy, Sprenger, Lisa, “Impact of a Pharmaceutical Care Incentive Program on the Asthma Medication Ratio among Pediatric Patients with Persistent Asthma Enrolled in a Medicaid Program”, *Journal of Managed Care & Specialty Pharmacy*, Vol 15, Issue 3, March 2021.

### Fatima Alshbool

Ali, H. E. A., Alarabi, A. B., Karim, Z. A., Rodriguez, V., Hernandez, K. R., Lozano, P. A., El-Halawany, M. S., Alshbool, F. Z., & Khasawneh, F. T. (2021). In utero thirdhand smoke exposure modulates platelet function in a sex-dependent manner. *Haematologica*, 107(1), 312-315.

Flores, R. J., Alshbool, F. Z., Giner, P., O’Dell, L. E., & Mendez, I. A. (2021). Exposure to Nicotine Vapor Produced by an Electronic Nicotine Delivery System Causes Short-Term Increases in Impulsive Choice in Adult Male Rats. *Nicotine Tob Res*, 24(3), 358-365.

Alarabi A.B., Karim Z.A., Lozano, P.A., Hernandez K.R., Khasawneh F.T., Alshbool F.Z., “Exposure to Thirdhand Hookah Elevates the Risk of Thrombogenesis By Enhancing Platelet Function”, *Vascular Discovery: From Genes to Medicine Meeting*, September 22-24, 2021.

Alarabi A.B., Ali H.E.A., Karim Z.A., Rodriguez, V., Hernandez K.R., Lozano, P.A., Alshbool F.Z., and Khasawneh F.T., “Investigation of the Mechanistic Impact of Prenatal Exposure to Thirdhand Smoke on Platelet Activation”, *Experimental Biology (Virtual) Annual Meeting*, April 27-30 2021.

Lozano, P.A., Boakye, E.T., Garcia, S.E., Kingbong, H.T., Naddour, E., Alarabi A.B., Khasawneh F.T., Alshbool F.Z., “The Antidepressant Duloxetine Inhibits Platelet Function and Protects against Thrombosis”, *Experimental Biology (Virtual) Annual Meeting*, April 27-30 2021.

Alarabi A.B., Karim Z.A., Rodriguez, V., Hernandez K.R., Lozano, P.A., Alshbool F.Z., and Khasawneh F.T., “In Utero Exposure to Thirdhand Smoke Modulates

Platelet Function and Thrombogenesis”, *Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Virtual Meeting, CA, February 24, 2021*

### Daniela Bazan

Panahi, L., Udeani, G., Horseman, M., Weston, J., Samuel, N., Joseph, M., Mora, A., Bazan, D., Updates in medical therapies in the management of pulmonary embolism. *Medicina*, January 2021

Jelena Stojšić, Pulmonary Embolism, Chapter Title. Anticoagulants in the Management of Pulmonary Embolism, Ladan Panahi, George Udeani, Michael Horseman, Jaye Weston, Nephly Samuel, Merlyn Joseph, Andrea Mora, Daniela Bazan and Pooja Patel. September 2021, Books, IntechOpen. ISBN ISBN 978-1-83969-967-2.

Garza D, Bazan D, Cantu J, Verduzco R. “Evaluation of the appropriate use of albumin in South Texas facility”. ASHP Midyear Clinical Meeting and Exhibition (Virtual); December 2021.

Oliveira K, Bazan D, Verduzco R. “Evaluation of ceftazidime-avibactam utilization in a South Texas institution”. ASHP Midyear Clinical Meeting and Exhibition (Virtual); December 2021.

### Annette DeSantiago

Bingham J, De Santiago A, Everett W, Stanislaw J. A practical approach to remote precepting in a chronic disease management call center setting during a pandemic. *Am J Health Syst Pharm*. 2021 Feb 8;78(4):289-291.

De Santiago A, Bingham J, Vaffis S, Scovis N, McGlamery E, Boesen K, Warholak T, Dhath H. Evaluating the role and value of a clinical pharmacist in a concierge primary care clinic. *J Am Pharm Assoc*. 2021 Jan 18:S1544-3191(20)30635-X.

### Charlotte Farris

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Davies M, Wang S, Wong E, Farris C, Ivy D. Student self-assessment of APPE and practice readiness using Entrustable Professional Activities [abstract]. In: *Proceedings of Annual Meeting for Association of American Colleges of Pharmacy*; 2021 July; virtual annual meeting.

Ramirez A, LaDow T, Sharma T, Farris C. Comparing safety outcomes of AUC24-based versus traditional trough-based monitoring of vancomycin [abstract]. In: *Proceedings of Midyear Clinical Meeting for ASHP*; 2021 December; virtual webinar.

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### Heather Hay

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Hay H, Hernandez J, Joshaghani M. Perceived Value of Self-Monitoring Blood Glucose (SMBG) by Primary

Care Physicians and Endocrinologists. *ASHP Midyear Meeting*, Dec 2021

### Robert Hutchison

Hutchison R, Carhart J, Whalen K, Holloway MG. Texas Prescription Drug Monitoring Program Evolution and Outcomes. *Texas Journal of Health-System Pharmacy*, 2021; 20(2): 22-27.

### Delaney Ivy

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Ivy D & North F. Tips for Creating an Advocacy Communication Model. *ACCP Ambulatory Care PRN Always Advocating Blog*; ePublished July 2021.

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Kamdar C, Segura D, & Ivy D. Parent and Caretaker Knowledge on Pediatric Over-the-counter Cough and Cold Medication Safety Practices. *SSHP Local Texas A&M School of Pharmacy Competition (Virtual)*; April 2021.

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### Andrea Mora

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#### Ladan Panahi

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Salim Surani, Idiopathic Pulmonary Fibrosis, Chapter Title. Pharmacological Management of Idiopathic Pulmonary Fibrosis, Ladan Panahi, George Udeani, Andrew Scott Tenpas, Theresa Ofili, Elizabeth Marie Aguilar, Sarah Burchard, Alexandra Ritenour, and April Chennat. October 2021, Books, IntechOpen, Accepted for Publication. Pending. ISBN 978-1-83969-240-6.

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Lowen T. Duncan, Advances in Health and Disease, Chapter 4. Gastroesophageal Reflux Therapy: Past, Present and Future, Ladan Panahi, Salim Surani, George Udeani, Deepa Desai, Niraj Patel and Jacob Sellers. 2021, Advances in Health and Disease (Numbered Series), Books, Medicine and Health, Nova Medicine and Health, Special Topics, May 2021. ISBN: 978-1-53619-433-3.

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#### Pooja Patel

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#### Victoria Pho

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#### Sara Rogers

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#### George Udeani

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## Awards, Grants, and Recognitions

### JOY ALONZO

#### Grants

- Principal Investigator, A randomized controlled study to assess SARS CoV-2 infection, viral shedding, and subsequent potential transmission in university students immunized with Moderna COVID-19 Vaccine; Funded for \$217,788 by the National Institutes of Allergy and Infectious Disease (NIH-SSU00145690).
- Co-Principal Investigator, Preventing Opioid Relapse: Integrating Behavioral and Medication Treatment for Opioid Use Disorder in Jails; Funded for \$500,000.
- Principal Investigator, TX DHHS/CDC COVID-19 Vaccine Education and Outreach Grant, Funded for \$300,000 by the Texas Department of Health and Human Services/CDC.

#### Awards

- Teaching Team for Interprofessional Excellence, Texas A&M University
- Outstanding Interprofessional Activity, Texas A&M University
- 7th Annual Interprofessional Education & Research Symposium (IPER 7) Outstanding Research Activity, Texas A&M Health

### FATIMA ALSHBOOL

#### Grants

- Principal Investigator, The Impact of Third-Hand E-Cigarette Exposure on Platelet Function and Thrombogenesis, NIH Small Research Grant Program (Parent R03 Clinical Trial Not Allowed) (1R03 ES030486-A1; NIH/NIEHS; Total costs: \$151,000.00. (September 18, 2020- August 30, 2022).
- Co-Investigator, In Utero Third-Hand Smoke Impact on Platelet Function and Thrombogenesis, NIH Exploratory/Developmental Research Grant Program (Parent R21; 1R21ES095170-01A1), National Institutes of Health, (August 1, 2018- July 31, 2021), Total costs: \$415,250
- Co-Investigator, The Impact of Third-Hand Smoke on Platelet Function and Thrombogenesis, Research Project Grant (1R01HL145053-01A1; NIH/NHLBI, July 1, 2019-June 30, 2024); Total costs: \$1,887,500.00

#### Awards

- Early Career Faculty Research Achievement Award, Texas A&M Rangel School of Pharmacy
- Karl Link Early Career Investigator Award in Thrombosis, Arteriosclerosis, Thrombosis and Vascular Biology

### DANIELA BAZAN

#### Grants

- Knapp Community Care Foundation, External grant for “Access & Clinical Outcomes of a Telehealth DCCM Program in Areas Serviced by the Knapp Community Care Foundation”, Funded for \$100,000

### CHARLOTTE FARRIS

#### Awards

- AACP Walmart Scholar – Meredith Davies (Fowler), Mentor: Charlotte Farris

### HEATHER HAY

#### Awards

- Preceptor of the Year, Texas A&M Rangel School of Pharmacy

### MICHAEL HORSEMAN

#### Awards

- Teaching Team of the Year Award, Texas A&M School of Pharmacy

### ROBERT HUTCHISON

#### Grants

- Team Investigator, Interdisciplinary research to improve health/ health equity in Texas, Co-leads Dr. Meagher and Dr. Fields. Preventing Opioid Relapse: Integrating Behavioral and Medication Treatment for Opioid Use Disorder in Jails. Funded for \$200,000 by the Texas A&M University Presidential Clinical Research Partnership (PCRP) Grant

### ANDREA MORA

#### Awards

- Teacher of the Year, P3 Class, 2020-2021. Texas A&M Rangel School of Pharmacy.
- Teaching team of the Year Award, IPT VII: Infectious Diseases. 2020-2021. Texas A&M Rangel School of Pharmacy.
- Texas A&M Health Care Hero, October 2021, Texas A&M Foundation.

### LADAN PANAHI

#### Awards

- Teaching team of the Year Award, IPT VII: Infectious Diseases. 2020-2021. Texas A&M Rangel School of Pharmacy

### POOJA PATEL

#### Grants

- Co-Principal Investigator, Evaluating prescriber’s barriers to utilizing pharmacists in the administration of long-acting injectable antipsychotics (LAIAs) in the community setting, APhA Foundation Incentive Grant; Amount awarded: \$1,000 (October 1, 2021-September 30, 2022).

### VICTORIA PHO

#### Awards

- The President’s Volunteer Service Award – Silver, San Jose Clinic
- Volunteer Provider Service Award, Houston Family Physicians

### NEPHY SAMUEL

#### Awards

- 2020 TSHP Poster Winner – Education Category, TSHP Annual Seminar, \$250



**GEORGE UDEANI**

**Grants**

- Principal Investigator, A randomized controlled study to assess SARS CoV-2 infection, viral shedding, and subsequent potential transmission in university students immunized with Moderna COVID-19 Vaccine; Funded for \$217,788 by the National Institutes of Allergy and Infectious Disease (NIH-SSU00145690).
- Co-Investigator, A randomized controlled study to assess SARS CoV-2 infection, viral shedding, and subsequent potential transmission in university students immunized with Moderna COVID-19 Vaccine; Funded for \$2,000,000 by the National Institutes of Allergy and Infectious Disease (NIH - SSU00145690).

**JAYE WESTON**

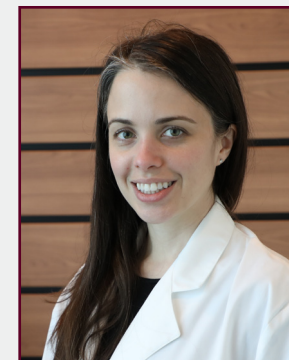
**Awards**

- Teaching Team of the Year 2020-2021, Infectious Diseases, Texas A&M University Rangel School of Pharmacy

## Research Highlights

**DR. SARA ROGERS**

The Texas A&M University Irma Lerma Rangel School of Pharmacy, in collaboration with the School of Medicine and Institute of Biosciences and Technology, launched the IPGx clinic with a 22-patient pilot cohort at Family Care Bryan on December 15, 2021. The IPGx pilot study supports emerging evidence that proactive medication management, combined with pharmacogenomic testing, can lead to improved health outcomes and reduced cost burdens. In addition, the precision medicine team, which includes Dr. George Udeani, Asim Dr. Abu-Baker and Dr. Sara Rogers from the Department of Pharmacy Practice, deployed informatic and bioanalytic methodologies that integrate weak signals in symptoms and chief complaints with pharmacogenomic analysis of approximately 90 single nucleotide polymorphic variants and clinical pharmacokinetic profiles to monitor drug-gene pairs and drug-drug interactions for medications with significant pharmacogenomic profiles. The utility of the approach was validated in a virtual patient case showing detection of significant drug-gene and drug-drug interactions of clinical significance. The study seeks to establish proof-of-concept for the creation of a registry and biobank to track clinical outcomes in patients enrolled in a bioanalytically-informed medication management program. Through this initiative, Texas A&M University joined an elite list of PGx implementers who are using Clinical Pharmacogenetics Implementation Consortium (CPIC) guidelines as part of a program to facilitate use of genetic tests to guide prescribing for patients in clinical care settings.



**DR. JOY ALONZO**

In 2021 Dr. Alonzo continued as the co-chair of the Texas A&M Opioid Task Force whose charter is to lead research, interventions, and education impacting the US Opioid Crisis and the lives of those suffering from opioid use disorder. In 2021, more than 5000 individuals received opioid overdose education & naloxone administration training, and more than 10,000 naloxone rescue kits have been distributed. Dr. Alonzo provides support to several externally funded interprofessional projects with a focus on substance use disorder to include the Golden Crescent Recovery Oriented Community Collaborative, and the iTrust program both funded by HRSA. Additionally, new partnerships with the ONDCP and HIDTA have resulted in expanded education and awareness addressing the illicitly manufactured fentanyl crisis. In addition to addressing the opioid crisis, Dr. Alonzo's research projects focused on the pandemic in 2021 with two projects: the NIH funded COVPN 3006 study designed to evaluate SARS-COV-2 transmissibility in young adults, and the TX DHHS funded COVID-19 Vaccine Education and Awareness Grant. Both projects had a special focus on the impacts of COVID-19 on under-served minorities in Texas and developing strategies to address low rates of vaccination and vaccine hesitancy in these populations.



## Post-Graduate Programs

### TEXAS A&M UNIVERSITY SCHOOL OF PHARMACY PGY1 RESIDENCY PROGRAM WITH DOCTORS HOSPITAL AT RENAISSANCE HEALTH (DHR HEALTH)

PGY1 residency program director:  
**Rene Verduzco, PharmD, BCPS**



PGY1 residency program coordinator:  
**Bazan, PharmD, BCPS**



PGY1 Residents:  
**Daniel Garza, PharmD and Katy Oliveira, PharmD**



#### RESIDENT ACCOMPLISHMENTS AND RESEARCH PROJECTS:

- Daniel Garza's Major Research Project: "In patients undergoing colorectal surgery, does the use of ertapenem for antimicrobial prophylaxis reduce the incidence of surgical site infections compared to cephalosporin with metronidazole within a 7-day period?"
- Katy Oliveira's Major Research Project: "Comparative outcomes of vaccinated and unvaccinated individuals hospitalized for COVID-19 in a South Texas institution"

### TEXAS A&M UNIVERSITY SCHOOL OF PHARMACY PGY2 INTERNAL MEDICINE RESIDENCY PROGRAM AT BAYLOR SCOTT & WHITE

PGY2 residency program director:  
**Charlotte Farris PharmD, BCPS**



PGY2 Resident:  
**Andrew Ramirez, PharmD**



Resident Research Project: Ramirez A, LaDow T, Sharma T, Farris C. Comparing safety outcomes of AUC24-based versus traditional trough-based monitoring of vancomycin [abstract]. In: Proceedings of Midyear Clinical Meeting for ASHP; 2021 December; virtual webinar.

### TEXAS A&M UNIVERSITY SCHOOL OF PHARMACY ACADEMIC TRAINING PROGRAM FOR RESIDENTS

**Delaney Ivy, PharmD, MSc, BCPS, CDE**



**Charlotte Farris PharmD, BCPS**



This academic training program is a 12-month longitudinal experience designed to teach PGY-1 and PGY-2 residents how to integrate effective educational techniques into a variety of learning experiences with diverse audiences. The purpose of the training program is to provide current residents with effective education and training, through mentorship from current Texas A&M Rangel School of Pharmacy faculty members, to effectively employ appropriate preceptor roles when engaged in teaching students, pharmacy technicians, or fellow health care professionals. During 2020 to 2021, 22 residents located throughout the state of Texas and 16 Texas A&M Rangel School of Pharmacy faculty participated in the academic training program. Residents perform activities such as

lecturing in a didactic setting, facilitating lab sessions, facilitating service-learning events, precepting students, developing course syllabus all under the direct mentorship of experienced faculty members. Each year, the success of the academic training program leads to further program expansion.

RESIDENCY PROGRAM	RESIDENT	MENTOR
CCMC, PGY1 <i>Corpus Christi</i>	Cherryl Tronzon Ashmal Ali Anna Kaihlanen Deepak Jhol	Andrea Mora Jaye Weston Mark Bremick Rene Verduzco
VA Texas Valley Coastal Bend Health Care System, PGY1 <i>Corpus Christi</i>	Emma Evans Paul Felts	Anne-Cecile Mingle Ladan Panahi
DHR, PGY1 <i>Edinburg</i>	Daniel Garza Katie Oliveira	Rene Verduzco Daniela Bazan
CHI St. Joseph's <i>College Station</i>	Brianne Braaten Jacob Sellers Alison Stonecipher	Nephy Samuel Trager Hintze Andrew Tenpas
Albertsons, PGY1-community <i>Houston</i>	Esther Epanya Mbango	Annette De Santiago
TAMU Vet Med <i>College Station</i>	Noah Cahill	Pooja Patel
BSW, PGY1 <i>Temple</i>	Natasha Parker Alexis Alba Alyssa Eaves Priyanka Kochuparambil Carly Schick (Oncology focused) Caylin Carson (Pediatrics focused)	Charlotte Farris Delaney Ivy Charlotte Farris Heather Hay Charlotte Farris Delaney Ivy
BSW / TAMU, PGY2 <i>Temple</i>	Andrew Ramirez	Charlotte Farris
BSW, PGY1-community <i>Temple</i>	Alex Ritenour Emily Pena	Heather Hay Delaney Ivy

## In Memoriam

MARK A. BREMICK, BS, PHARM  
INSTRUCTIONAL ASSISTANT PROFESSOR OF PHARMACY PRACTICE





TEXAS A&M UNIVERSITY  
Irma Lerma Rangel  
School of Pharmacy