



TEXAS A&M UNIVERSITY
Irma Lerma Rangel
College of Pharmacy



TEXAS A&M UNIVERSITY IRMA LERMA RANGEL COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
ANNUAL REPORT - 2020

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.

Letter from the Department Head

The year 2020 was one of transition for leadership in the Department of Pharmacy Practice. I took over as department head from Dr. Asim Abu-Baker, who served as interim head, on January 2, 2020. I am honored and humbled to be appointed as Head of the Department of Pharmacy Practice and wish to thank Dr. Asim Abu-Baker for his tireless effort in keeping the Department operating smoothly during the transition.

No sooner did I step into this role was the world hit with one of the worst pandemics in a century. By March of 2020, we were in full-force preparations for the unknown outcomes of the COVID-19 pandemic, as we devised methods to deliver instructions to our students and take care of our patients virtually. The pandemic tested our strength as a group and the resilience of the Department, as we worked tirelessly together to ensure we moved forward and steadfast with the business of the Department without interruptions. In the early days of the pandemic, there was a shortage of Personal Protective Equipment (PPE); however, one of our faculty quickly turned her office into a mini-factory and produced 405 masks for the University and community. There was no vaccine in sight. Thus, on the research front, the Department of Pharmacy Practice partnered with the College of Medicine, Harvard University, Baylor College of Medicine, Cedars Sinai Medical Center, and MD Anderson on a COVID-19 vaccine clinical trial titled: BCG Vaccine for Health Care Workers as Defense Against COVID 19 (BADAS). By the end of the year, we had enrolled over 600 of the 700-participant target. This research was supported through the Texas A&M Chancellor's Research Initiative for \$2,500,000. The nation and the world sought other vaccines. By late Fall, when these new vaccines became available, our faculty and students were ready and came out en masse not only to immunize against influenza but also against SARS-COV-2.

The virus afflicted several of us, but we marched on several fronts in various healthcare settings to provide care for the sick without casualty. Unfortunately, our story was not shared by the approximately 345,323 Americans who lost their lives in 2020 as a result of COVID-19. It was a devastating loss for us as we are continuing to mourn them.

Despite the pandemic, we continued with departmental activities as we prepared to employ novel technologies for classroom instruction, and assessments, for the Fall of 2020. The Department embarked on a successful departmental retreat. By the end of the year, we had begun to charter new mission, vision statements and goals for the Department, refining them in the Fall and dovetailing them into the College strategic plan. Our new mission, vision, and goals are highlighted in another section of this report. The Department elected to tackle the Research and Increasing Efficiency and Effectiveness (workload) goals. Through this effort emerged the Workload Calculator for use in defining workload units and expectations to ensure sustainable and equitable workload goals. The Workload Calculator continues to be refined.

Prior to the COVID-19 pandemic, the country was dealing with another crisis, the Opioid Crisis. The Department of Pharmacy Practice was heavily involved on various fronts in providing some solutions. Most importantly, this occurred via Opioid Overdose Education and Naloxone Administration (OENA) Program funded by Texas Targeted Opioid Response (TTOR UTSA).



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

If it was not a global pandemic (COVID-19) in 2020 that the Department was dealing with, it was dealing with the Opioid Crisis or a community crisis. In December of 2018, two rural hospitals in Milam County, Texas, abruptly shuttered. This left residents scrambling to go to the nearest hospital 50 miles away in Bryan-College Station. This was almost impossible for some, especially the seniors who cannot afford public transportation costs of \$5.50 for the trip. By mid-2020, through the Moonshot grant, the Department of Pharmacy Practice became involved with other Texas A&M University (TAMU) units to develop and deploy the Texas A&M/OnMed Integrated Virtual Healthcare Station in Milam County as an innovative, sustainable solution to promote access to healthcare. This telemedicine station is fitted with a robotic pharmacy that can automatically dispense up to 200 drugs from its formulary.

In 2020 Pharmacy Practice faculty practiced, taught our Advanced Pharmacy Practice Experience (APPE), Introductory Pharmacy Practice Experience (IPPE), and residents through a distributive model, at the following sites:

Acute Care Clinical Faculty - Texas A&M Affiliates

- Baylor Scott & White, Temple, Texas
- St. Joseph Health (formerly CHI) Regional Health Care Center, Bryan, Texas
- CHRISTUS Spohn Health System – Shoreline, Corpus Christi, Texas
- Doctors Hospital Renaissance Hospital, Edinburg, Texas
- Houston Methodist, Texas
- Lyndon B Johnson Hospital – Harris Health, Houston, Texas
- Memorial Herman, Houston, Texas
- Seton Medical Center, Williamson – Round Rock, Texas






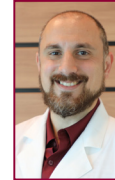






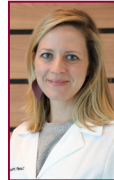






















Ambulatory Care Clinical Faculty – Texas A&M Affiliates

- Baylor Scott & White, Temple, Texas
- Coastal Bend Health Education Center (CBHEC) – Texas A&M University
- Corpus Christi Veterans Administration, Texas
- Fe Medical Services, Corpus Christi, Texas
- Health for All, Bryan Texas
- HealthPoint Bryan/College Station, Texas
- Memorial Herman, Houston, Texas
- Sacred Heart Community Clinic, Round Rock, Texas
- San Jose Clinic, Houston, Texas

We highlight the remarkable productivity of our faculty in teaching and service in another section of this report. Additionally, faculty productivity in awards, research, publications were commendable and also presented within this report. Despite the challenges of the year 2020, the Department was resilient, thriving in adversity, and quite productive. Thus, I take this opportunity to thank the faculty, staff, College, Texas A&M University, and other stakeholders.

I am optimistic that the worst of this pandemic is over and look forward to brighter days in 2021.

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	 Adam Brown, PharmD, BCPS Clinical Assistant Professor
 Juan F. Castro, MD, MBA Clinical Assistant Professor	 Sandy Diec, PharmD Clinical Assistant Professor	 Joan Everett-Houser, PharmD, EdD Instructional Assistant Professor	 Charlotte Farris, PharmD, BCPS Clinical Assistant Professor	 Stephen "Eric" Grayson, PharmD Clinical Assistant Professor	 Heather Hay, PharmD, BCPS, BCACP, CD Clinical Assistant Professor	 Paul Holder, PharmD Instructional Associate Professor	 Michael Allen Horseman, PharmD Clinical Associate Professor	 Robert W. Hutchison, PharmD Clinical Associate Professor
 Delaney Ivy, PharmD, MSc, BCPS, CDE Clinical Assistant Professor	 Merlyn Joseph, PharmD Clinical Assistant Professor	 Jeffrey Luke, PharmD Clinical Assistant Professor	 Henri R. Manasse, Jr., PhD Adjunct Clinical Professor	 Anne-Cécile Mingle, PharmD, MEd Clinical Assistant Professor	 Andrea Mora, PharmD Clinical Associate Professor	 Frank North, PharmD, MPA Instructional Assistant Professor	 Theresa Ofili, PharmD, MPH Instructional Assistant Professor	 Ladan Panahi, PharmD Clinical Assistant Professor
 Pooja Patel, PharmD Clinical Assistant Professor	 Victoria B. Pho, PharmD, BS, BCGP Clinical Assistant Professor	 Sohail Rao, MD, MA, DPhil Adjunct Clinical Professor	 Natalie Rosario, PharmD, MPH, BCACP Clinical Assistant Professor	 Nephy G. Samuel, PharmD, BCPS Clinical Assistant Professor	 Salim R. Surani, MD, MPH, MSHM, FACP, FCCP, FAASM Adjunct Clinical Professor	 Rene Verduzco, PharmD, BCPS Clinical Assistant Professor	 Jaye S. Weston, PharmD, MS, RPh Clinical Assistant Professor	

Teaching Achievements

TEACHER OF THE YEAR (MAY 2020)

Dr. Paul Holder, P1 class



Dr. Heather Hay, P2 class



Professor Mark Bremick, P3 class



TEACHING TEAM OF THE YEAR (MAY 2020)

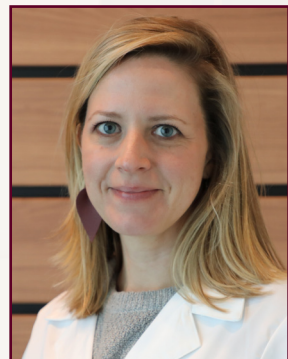
Integrated Pharmacotherapy (IPT) V:

Psychiatry and Addiction - Dr. Joy Alonzo, Dr. Hamed Ali-Ismail, Dr. Anne-Cecile Mingle



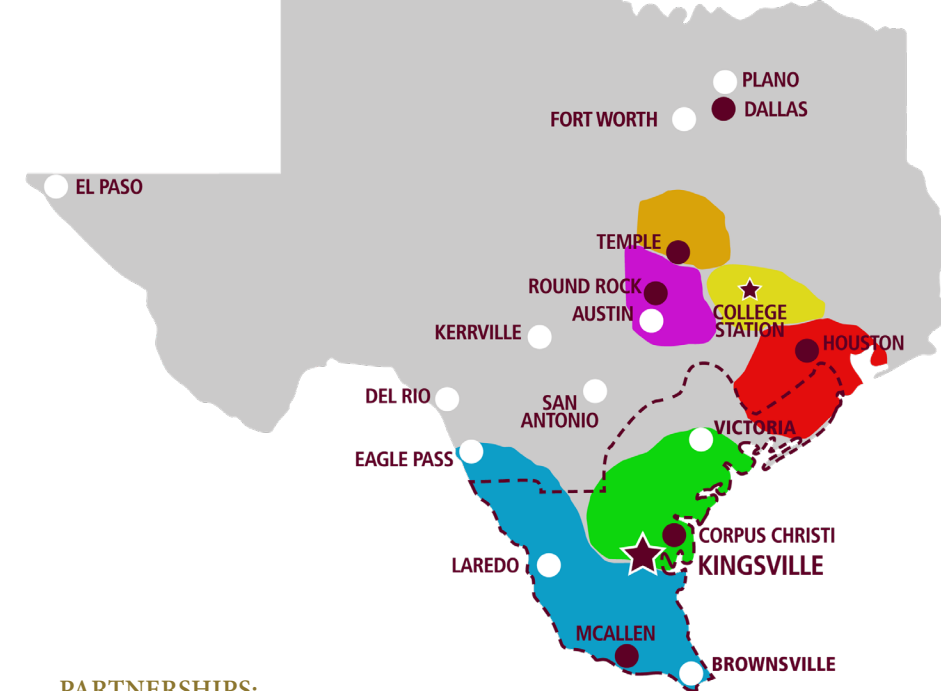
Integrated Pharmacotherapy (IPT) II:

Electrolytes, Acid-Base, Anemia, and Kidney Disease - Dr. Charlotte Farris and Dr. Merlyn Joseph



Pharmacy Service

Clinical pharmacy services at the Rangel College 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
- CHRISTUS Spohn Health System
- Coastal Bend Health Education Center
- Coastal Bend Wellness Foundation
- Doctor's Hospital at Renaissance
- FE Medical Services PLLC
- Health for All
- HealthPoint – Bryan/College Station
- Houston Methodist
- Memorial Hermann Texas Medical Center
- PAM Rehabilitation Hospital at Corpus Christi
- Randall's Pharmacy
- Sacred Health Community Clinic
- San Jose Clinic
- St. Joseph Health (Formerly CHI) Regional Hospital
- Valley Baptist Hospital, Harlingen, TX
- VA Texas Valley Coastal Bend Health Care
- Texas A&M Veterinary Teaching Hospital

5,452

DOCUMENTED INTERVENTIONS FROM AMBULATORY CARE FACULTY

23,247

DOCUMENTED INTERVENTIONS FROM ACUTE CARE FACULTY

266

APPE AND IPPE STUDENTS PRECEPTED

33

PGY1 RESIDENTS PRECEPTED

7

PGY2 RESIDENTS PRECEPTED

1

VETERINARY MEDICINE RESIDENT PRECEPTED

7

FAMILY MEDICINE RESIDENTS PRECEPTED

Service Highlights

DR. JOY ALONZO

Dr. Joy Alonzo, PharmD, is Co-Chair of the Texas A&M Opioid Task Force. The Task Force is an interprofessional organization consisting of representatives from all of the Texas A&M Health Science Center Components. The focus of the Task Force is to promote education, outreach, interventions, and research regarding the US Opioid Crisis. Since 2018, the Task Force has provided evidence-based education and interventions regarding naloxone administration and distribution, medication assisted treatment, and psycho-social supports. Key accomplishments during 2020 include the distribution of more than 3.5 million dollars of naloxone, execution of the largest mass naloxone rescue kit training event held in TX, and initiation of the EMPOWER ECHO program which is an online mentoring program focused on Opioid Use Disorder (OUD) for clinicians.



DR. FRANK NORTH

Dr. Frank North, PharmD, M.P.A. was elected President-Elect of the National Pharmaceutical Association (NPhA). The NPhA was founded historically as the minority, then African-American professional pharmacy association now representing a more diverse minority pharmacists, pharmacists committed to serving the underserved, student pharmacists in the affiliated Student National Pharmaceutical Association (SNPhA). Dr. North's additional professional service includes: Director on the Texas Pharmacy Association, American Pharmacists Association (APhA) House of Delegates (NPhA Delegate, New Business Review Committee member, and House Rules Review Committee member), Member of the American Society of Consultant Pharmacists (ASCP) Racial Equity and Cross-Cultural Education Committee. Dr. North joined the Rangel College of Pharmacy in December 2020. Dr. North brings with him various professional service participations at state and national levels.



DR. GEORGE UDEANI

Dr. George Udeani, PharmD, was elected President, Coastal Bend Society of Health-System Pharmacists, and to the Board of Directors, Texas Society of Health-System Pharmacists (TSHP). Coastal Bend Society of Health-System Pharmacists is a chapter of TSHP. The Texas Society of Health-System Pharmacists (TSHP) began in 1949, and since then has remained a dynamic professional organization, which serves Texas health-system pharmacy professionals. These include pharmacists, residents, technicians, students, and other professional colleagues with common goals in public health, optimized patient care and professional practice. TSHP core values include advocacy, leadership, community, education, and research.



Thriving Through COVID-19

BY DR. ASIM ABU-BAKER

Like many academic institutions in the spring of 2020 Rangel College of Pharmacy was faced with the challenge of the COVID-19 pandemic. The college successfully devised ways to safely and effectively continue the progression of our PharmD students. Given our two-campus model and familiarity with synchronous distance learning through zoom, we were able to complete the delivery of the didactic curriculum virtually. Skills lab scheduling was modified and some labs were delayed until the summer in order to ensure the safety of our students. In the experiential curriculum, the Office of Experiential Education worked to ensure that our fourth-year students were able to complete all APPE hours and requirements in time for graduation. This was a real challenge, but a strong network of sites and collaboration with our preceptors across our six hubs allowed all Class of 2021 students to complete their hours for on-time graduation. This was a major accomplishment which took a lot of time and energy from the OEE staff and our preceptors, but it was well worth the effort.



In the summer of 2020, the College of Pharmacy formed the COVID-19 Task Force to begin planning for the upcoming year. This group of administrators, faculty, and staff created guidelines and processes to plan for on-campus activities and student return to campus for the Fall 2020 semester. Directives from this group included COVID-19 screening parameters and on-campus modifications which involved:

- Fully-staffed temperature and symptom screening stations on Kingsville and College Station campuses for weekly screening of over 400 faculty, staff, and students
- Contact tracing guidelines based on CDC recommendations to identify any COVID-positive or suspected cases
- Modification of all classroom and common spaces to ensure social distancing of 6 feet or greater
- Facial covering requirements for anyone on campus
- Working closely with the Office of Academic Affairs to modify Fall semester in-person attendance to ensure social distancing for returning students

This effort from the COVID-19 Task Force included over 500 hours devoted to the COVID-19 response from faculty and staff. This tremendous effort ensured the safe return of our faculty, staff, and students to the College of Pharmacy campuses in the Fall 2020 semester.

Late in 2020 when COVID-19 vaccines were being developed, members of the Task Force began to plan for Texas A&M University-wide vaccination efforts in collaboration with Fe Medical Services in Corpus Christi, TX. This was a continuation of our effort as a College to ensure the safety of our student health care professionals.



Scholarly Achievements

PEER-REVIEWED PUBLICATIONS (2015-2020)

Joy Alonzo

Yucel A, Sanyal S, Essien EJ, Mgbere O, Aparasu R, Bhatara VS, Alonzo JP, Chen H. Racial/ethnic differences in treatment quality among youth with primary care provider-initiated versus mental health specialist-initiated care for major depressive disorders. *Child and adolescent mental health*. 2020 Feb;25(1):28-35.

Medhekar R, Aparasu R, Bhatara V, Johnson M, Alonzo J, Schwarzwald H, Chen H. Risk factors of psychotropic polypharmacy in the treatment of children and adolescents with psychiatric disorders. *Research in Social and Administrative Pharmacy*. 2019 Apr 1;15(4):395-403.

Medhekar R, Fujimoto K, Aparasu RR, Bhatara VS, Johnson ML, Alonzo JP, Schwarzwald HL, Chen H. Physician care coordination and the use of psychotropic polypharmacy in the management of pediatric mental disorders. *Journal of managed care & specialty pharmacy*. 2019 Jan;25(1):29-38.

Patel A, Medhekar R, Ochoa-Perez M, Aparasu RR, Chan W, Sherer JT, Alonzo J, Chen H. Care provision and prescribing practices of physicians treating children and adolescents with ADHD. *Psychiatric Services*. 2017 Jul 1;68(7):681-8.

Yucel A, Essien EJ, Sanyal S, Mgbere O, Aparasu RR, Bhatara VS, Alonzo JP, Chen H. Racial/ethnic differences in the treatment of adolescent major depressive disorders (MDD) across healthcare providers participating in the medicaid program. *Journal of affective disorders*. 2018 Aug 1;235:155-61.

Yucel A, Essien E, Aparasu RR, Mgbere O, Bhatara V, Alonzo J, Chen H. Pathway to depression care in children and adolescents first identified by primary care providers versus psychiatrists. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2016;10(55):S177.

Farber HJ, Buckwold FJ, Lachman B, Simpson JS, Buck E, Arun M, Valadez AM, Ruiz T, Alonzo J, Henry A, Cos-Okpalla N. Observed effectiveness of palivizumab for 29–36-week gestation infants. *Pediatrics*. 2016 Aug 1;138(2).

Moultry, A., Alonzo, J., Foytic, G. Ndefo, U., Davis, P. Simmons, E., Gardner, E., Toni, C., “Implementation

of a Medication Therapy Management Intervention in Ambulatory Care Settings: Experiences and Lessons Learned from the MyRX Pilot” Published and distributed by the AHRQ. 2016.

Moultry A, Alonzo J, Foytic G, Ndefo U, Davis P, Simmons E, Gardner E, Toni C. Convening a Learning Community to Advance Medication Therapy Management for At-Risk Populations”; Published and distributed by the AHRQ. 2016.

Fatima Alshbool

Alarabi AB, Karim ZA, Hinojos V, Lozano PA, Hernandez KR, Ramirez JE, Ali HE, Khasawneh FT, Alshbool FZ. The G-protein $\beta\gamma$ subunits regulate platelet function. *Life Sciences*. 2020 Dec 1;262:118481.

Taleb ZB, Kalan ME, Bahelah R, Boateng GO, Rahman M, Alshbool FZ. Vaping while high: factors associated with vaping marijuana among youth in the United States. *Drug and alcohol dependence*. 2020 Dec 1;217:108290.

Ramirez JE, Karim ZA, Alarabi AB, Hernandez KR, Taleb ZB, Rivera JO, Khasawneh FT, Alshbool FZ. The JUUL E-cigarette elevates the risk of thrombosis and potentiates platelet activation. *Journal of Cardiovascular Pharmacology and Therapeutics*. 2020 Nov;25(6):578-86.

Alarabi AB, Karim ZA, Ramirez JE, Hernandez KR, Lozano PA, Rivera JO, Alshbool FZ, Khasawneh FT. Short-term exposure to waterpipe/hookah smoke triggers a hyperactive platelet activation state and increases the risk of thrombogenesis. *Arteriosclerosis, thrombosis, and vascular biology*. 2020 Feb;40(2):335-49.

Daniela Bazan

Hernández-Muñoz JJ, De Santiago AC, Cedrone SZ, Verduzco RA, Bazan DZ. Impact of Pharmacist-Led Drug Therapy Management Services on HbA1c Values in a Predominantly Hispanic Population Visiting an Outpatient Endocrinology Clinic. *Journal of Pharmacy Practice*. 2020 Jun 4:0897190020927863.

Juan Castro

Nguyen L, Fischer K, Castro J, Diec S. Student-led foot-care sessions for patients with diabetes. *American Journal of Health-System Pharmacy*. 2019 Nov 15;76(22):1823-4.

Sandy Diec

Li D, Conson M, Kim N, Yasuda M, Ivy D, Diec S, Godley P. Patient and provider characteristics and outcomes associated with outpatient antibiotic overuse in acute adult bronchitis. *Baylor University Medical Center Proceedings 2020 Apr 2 (Vol. 33, No. 2, pp. 183-187)*. Taylor & Francis.

Nguyen L, Fischer K, Castro J, Diec S. Student-led foot-care sessions for patients with diabetes. *American Journal of Health-System Pharmacy*. 2019 Nov 15;76(22):1823-4.

Charlotte Farris

Mogaka B, Clary D, Hong C, Farris C, Perez S. Medication reconciliation in the emergency department performed by pharmacists. In *Baylor University Medical Center Proceedings 2018 Oct 2 (Vol. 31, No. 4, pp. 436-438)*. Taylor & Francis.

Koo CL, Demps EL, Farris C, Bowman JD, Panahi L, Boyle P. Impact of flipped classroom design on student performance and perceptions in a pharmacotherapy course. *American journal of pharmaceutical education*. 2016 Mar 25;80(2).

Farris C, Bowman J, Demps E, Koo C, Boyle P. A Case study in a pharmacy therapeutics course. In L. Santos Green, J.R. Banas, & R. Perkins (Eds.), *The flipped college classroom: Conceptualized and re-conceptualized*. New York: Springer. 2017.

Heather Hay

Tran T, Miller H, Ivy D. Evaluation of Pharmacist Involvement in Medicare Wellness Visits. *Journal of pharmacy practice*. 2020 Dec;33(6):745-8.

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Michael Horseman

A Horseman M, Surani S, D Bowman J. Endotoxin, toll-like receptor-4, and atherosclerotic heart disease. *Current cardiology reviews*. 2017 May 1;13(2):86-93.

Robert Hutchison

Coon SA, Hill LG, Hutchison RW, Arnold LM, Jarrett JB, Ottney AR, Oung AB, Painter NA, Smith MA, Stranges PM, Tran TH. Mobilizing pharmacists to address the opioid crisis: A joint opinion of the ambulatory care and adult medicine practice and research networks of the American College of Clinical Pharmacy. *Journal of the American College of Clinical Pharmacy*. 2020 Dec;3(8):1493-513.

Appiah B, Burdine JN, Cummings S, Poudyal A, Hutchison RW, Forjuoh SN, McLeroy KR. The effect of health-related information seeking and financial strain on medication nonadherence among patients with diabetes and/or hypertension in central Texas. *Journal of Pharmaceutical Health Services Research*. 2020 Sep;11(3):261-8.

Lee WC, Hutchison RW, Lin S, Kuo YF. Patient Education on Opioid Storage, Security, and Disposal of Opioids: Should the Approach Differ in Rural and Urban Settings? *Texas journal of health-system pharmacy*. 2020;19(1):46.

Hutchison Jr RW. Storage, security, and disposal. *Journal of opioid management*. 2019 Sep 1;15(5):353-4.

Delaney Ivy

Tran T, Miller H, Ivy D. Evaluation of Pharmacist Involvement in Medicare Wellness Visits. *Journal of pharmacy practice*. 2020 Dec;33(6):745-8.

Frederick A, Juan J, Ivy D, Maldonado YM. Effect of Visit Frequency of Pharmacist-Led Diabetes Medication Management Program. *Journal of Pharmacy Practice*. 2020 Aug 4:0897190020948685.

Li D, Conson M, Kim N, Yasuda M, Ivy D, Diec S, Godley P. Patient and provider characteristics and outcomes associated with outpatient antibiotic overuse in acute adult bronchitis. In *Baylor University Medical Center Proceedings 2020 Apr 2 (Vol. 33, No. 2, pp. 183-187)*. Taylor & Francis.

Evans CE, Getchell KE, Ivy DR. Proposed criteria for the use of low-dose vitamin k supplementation in patients using vitamin K antagonists: a literature review of a clinical controversy. *Journal of pharmacy practice*. 2018 Apr;31(2):208-15.

Childs-Kean LM, Ivy DR, Gonzales C, McIntyre W. Development of a tool to evaluate advanced pharmacy

practice experience preceptors in the clinical setting at a United States college of pharmacy: a pilot study. *Pharmacy Education*. 2016 Jun 5;16.

Merlyn Joseph

Chau T, Joseph M, Ledesma Jr J, Hsu DW. Case of Severe Accidental Hypothermia Cardiac Arrest in a Subtropical Climate and Review of Management. *Open Access Emergency Medicine: OAEM*. 2020;12:399.

Ho T, Jimenez A, Sanchez I, Seeger C, Joseph M. Sleep-related eating disorder associated with zolpidem: cases compiled from a literature review. *Sleep medicine: X*. 2020 Jul 18:100019.

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Andrea Mora

Nowbakht C, Edwards AR, Rodriguez-Buritica DF, Luce AM, Doshi PB, De Golovine A, Bynon JS, Nigo M. Two cases of fatal hyperammonemia syndrome due to *Mycoplasma hominis* and *Ureaplasma urealyticum* in immunocompromised patients outside lung transplant recipients. *Open forum infectious diseases* 2019 Mar (Vol. 6, No. 3, p. ofz033). US: Oxford University Press.

Nigo M, Luce AM, Arias CA. Long-term use of tedizolid as suppressive therapy for recurrent methicillin-resistant *Staphylococcus aureus* graft infection. *Clinical Infectious Diseases*. 2018 Jun 1;66(12):1975-6.

Phe K, Shields RK, Tverdek FP, Aitken SL, Guervil DJ, Lam WY, Musgrove RJ, Luce AM, Tam VH. Predicting the risk of nephrotoxicity in patients receiving colistimethate sodium: a multicentre, retrospective, cohort study. *Journal of Antimicrobial Chemotherapy*. 2016 Dec 1;71(12):3585-7.

Nesher L, Hadi CM, Salazar L, Wootton SH, Garey KW, Lasco T, Luce AM, Hasbun R. Epidemiology of meningitis with a negative CSF Gram stain: under-utilization of available diagnostic tests. *Epidemiology & Infection*. 2016 Jan;144(1):189-97.

Theresa Ofili

Dongarwar D, Ajewole VB, Oduguwa E, Ngujeda A, Harris K, Ofili TU, Olaleye OA, Salihu HM. Role of social determinants of health in widening maternal and child health disparities in the era of COVID-19 pandemic. *International Journal of Maternal and Child Health and AIDS*. 2020;9(3):316.

Freijer K, Volger S, Pitter JG, Molsen-David E, Cooblall C, Evers S, Hiligsmann M, Danel A, Lenoir-Wijnkoop I, Terms IN, Team DW. Medical nutrition terminology and regulations in the United States and Europe—a scoping review: report of the ISPOR Nutrition Economics Special Interest Group. *Value in Health*. 2019 Jan 1;22(1):1-2.

Ladan Panahi

Panahi L, Saenz II JA, Nguyen N, Udeani G, Surani S. Hypercoagulation from Concomitant Administration of Tamoxifen and Warfarin. *Cureus*. 2020 May;12(5).

Miller H, Panahi L, Tapia D, Tran A, Bowman JD. Loperamide misuse and abuse. *Journal of the American Pharmacists Association*. 2017 Mar 1;57(2):S45-50.

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Mohebbi L, Serna O, Esse T, Panahi L. How pharmacists can impact high risk medication utilization, specifically skeletal muscle relaxants, in the medicare elderly population: a retrospective analysis. *Abstract. Journal of Managed Care Pharmacy*. 2015 Apr; 21(4a). S93.

Pooja Patel

Patel PH, Surani S. The COVID-19 Treatment Soup: Is Combination Therapy Better? *Acta Scientific Medical Sciences* 2020;4(8):01.

Patel PH, Dickerson KW. Impact of the implementation of project re-engineered discharge for heart failure patients at a Veterans Affairs Hospital at the Central Arkansas Veterans Healthcare System. *Hospital pharmacy*. 2018 Jul;53(4):266-71.

Victoria Pho

Lee JK, Tomasa L, Evans P, Pho VB, Bear M, Vo A. Impact of geriatrics elective courses at three colleges of pharmacy: attitudes toward aging and eldercare. *Currents in Pharmacy Teaching and Learning*. 2019 Dec 1;11(12):1239-47.

Pho V, Azali L, Wang C, Villa GG. The 7 Habits of Highly Effective Pharmacy Students and Interns. *Pharmacy Careers*. 2018 Aug.

Lee JK, Fosnight SM, Estus EL, Evans PJ, Pho VB, Reidt S, Reist JC, Ruby CM, Sibicky SL, Wheeler JB. Clinical Research That Matters: Designing Outcome-Based Research for Older Adults to Qualify for Systematic Reviews and Meta-Analyses. *The Consultant Pharmacist*. 2018 Jan 1;33(1):24-32.

Nephy Samuel

Cox CD, Samuel NG. Utilizing an Innovative Preceptor Video Mini-Series to Prepare Students for Experiential Rotations: Does it Work? *INNOVATIONS in pharmacy*. 2017 Jul 3;8(2).

Cox CD, Samuel NG, Cheon J. Use of an innovative interprofessional mini-series movie to train preceptors. *INNOVATIONS in pharmacy*. 2017 Jun 27;8(2).

Samuel NG, Seifert CF. Risk of bleeding in patients on full-dose enoxaparin with venous thromboembolism and selective serotonin reuptake inhibitors. *Annals of Pharmacotherapy*. 2017 Mar;51(3):226-31.

George Udeani

Panahi L, Saenz II JA, Nguyen N, Udeani G, Surani S. Hypercoagulation from Concomitant Administration of Tamoxifen and Warfarin. *Cureus*. 2020 May;12(5).

Kalani C, Venigalla T, Bailey J, Udeani G, Surani S. Sepsis patients in critical care units with obesity: is obesity protective? *Cureus*. 2020 Feb;12(2).

Arredondo E, Udeani G, Surani S. “COVID Monoclonal Antibodies and Current Research: Are We There Yet?”. *Acta Scientific Medical Sciences* 4.12 (2020): 74-80.

Deol HS, Surani SR, Udeani G. Inter-rater reliability of the ramsay sedation scale for critically-ill intubated patients. *Cureus*. 2019 Oct;11(10).

Bailey J, Awudi E, Kalani C, Udeani G, Varon J, Surani S. Accuracy of calculated creatinine among amputees: case presentation and literature review. *Critical Care & Shock*. 2019 Oct 1;22(4).

Johnson N, Varughese B, De La Torre MA, Surani SR, Udeani G. A review of respiratory biologic agents in severe asthma. *Cureus*. 2019 Sep;11(9).

Kalani C, Awudi E, Alexander T, Udeani G, Surani S. Evaluation of the efficacy of direct oral anticoagulants (DOACs) in comparison to warfarin in morbidly obese patients. *Hospital practice*. 2019 Aug 8;47(4):181-5.

Bailey J, Udeani G, Salim S. Treatment review of hospital-acquired infections. *Creative Commons, Croatia*, <http://creativecommons.org/licenses/by/3.0/>, 2018.

Donald BJ, Surani S, Deol HS, Mbadugha UJ, Udeani G. Spotlight on solithromycin in the treatment of community-acquired bacterial pneumonia: design, development, and potential place in therapy. *Drug design, development and therapy*. 2017;11:3559.

Kalani C, Udeani G, Surani S. Medical and non-medical therapy for pulmonary hypertension. In: *Advances in Pulmonary Hypertension*. www.avidscience.com, 2017.

Rene Verduzco

Hernández-Muñoz JJ, De Santiago AC, Cedrone SZ, Verduzco RA, Bazan DZ. Impact of Pharmacist-Led Drug Therapy Management Services on HbA1c Values in a Predominantly Hispanic Population Visiting an Outpatient Endocrinology Clinic. *Journal of Pharmacy Practice*. 2020 Jun 4:0897190020927863.

Jaye Weston

Davis LC, Covey RB, Weston JS, Hu BB, Laine GA. Pharmacist-driven antimicrobial optimization in the emergency department. *American Journal of Health-System Pharmacy*. 2016 Mar 1;73(5_Supplement_1):S49-56.

Awards, Grants, and Recognitions (2015-2020)

JOY ALONZO

Grants

- Principal Investigator, Blue Cross Blue Shield – Moonshot, \$2,500,000 8/2019- Present
- Principal Investigator, OENA, TTOR, \$2.4 Million 5/2018- Present
- CO-I, HRSA RCORP Golden Crescent, \$1.5 Million 6/2019- Present
- CO-I, HRSA iTrust, \$1.5 Million 2/2019- Present
- CO-I, USDA OUD Education “Think Smart” Grant, 500K 2/2019-5/2020
- CO-I, Global Hispanic Health Initiative, Pharmacist Intervention: Asthma, 250K 8/2019-04/20
- CO-I, Project ENDDependence, 500K 06/2017-04/2020

Awards

- Teaching Team of the Year COP 05/2020
- IPE Faculty Team of the Year 10/2020
- IPE Research Team of the Year 10/2019
- Houston Medication Safety Symposium Poster Competition Gold Medal 05/2017

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)
- Principal Investigator, Investigation of the Platelet 5HT_{2A} and P2Y₁ Receptors, AHA Institutional Research Enhancement Award (AIREA; 18AIREA33960421), The American Heart Association; Total costs: \$154,000 (July 1, 2018-Dec 30, 2021)
- 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: \$415,250.00
- 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

- 2020 JCPT (Journal of Cardiovascular Pharmacology and Therapeutics) Editor’s Prize for the Best Basic/ Translational Paper, SAGE Publishing

JUAN CASTRO

Awards

- The Texas A&M University 2019 Association of Former Students College-Level Teaching Award 2019
- Teacher of the year TAMU Rangel College of Pharmacy 2018

CHARLOTTE FARRIS

Grants

- Student Success Faculty Fellows Program, TAMU Center for Teaching Excellence – Award: \$10,000 “Student success through multimodal assessment & self-regulated learning” 2018

Awards

- Teaching team of the Year, IPT I: Electrolytes, Acid-Base, Anemia, and Kidney Diseases, 2019 – 2020. Texas A&M Rangel College of Pharmacy
- Teacher of the Year (P2), 2018 - 2019. Texas A&M Rangel College of Pharmacy
- Teaching team of the Year, IPT I: Electrolytes, Acid-Base, Anemia, and Kidney Diseases, 2018-2019. Texas A&M Rangel College of Pharmacy
- Teaching team of the Year, IPT I: Electrolytes, Acid-Base, Anemia, and Kidney Diseases, 2017 - 2018. Texas A&M Rangel College of Pharmacy
- Faculty Preceptor of the Year, 2015 – 2016. Texas A&M Rangel College of Pharmacy

HEATHER HAY

Awards

- P2 Teacher of the Year 2019-2020
- Association of Former Students Distinguished Award in Teaching, 2018
- IPT2 Team Teaching Team of the Year 2015-2016, 2016-2017
- P1 Teacher of the Year 2015-2016

MICHAEL HORSEMAN

Awards

- P3 Teacher of the Year 2015-2016

ROBERT HUTCHISON

Grants

- REDI Grant (under the School of Public Health - \$20,000) Medication Adherence; Published - Appiah, B., Burdine, J.N., Cummings, S., Poudyal, A., Hutchison, R.W., Forjuoh, S.N. and McLeroy, K.R. (2020), The effect of health-related information seeking and financial strain on medication nonadherence among patients with diabetes and/or hypertension in central Texas. *J Pharm Health Serv Res*, 11: 261-268. doi:10.1111/jphs.12353, 2019 – 2020
- Community Service/Service-Learning Project Grant - \$10,000 - Diabetes Education & Health Professional Cultural Competency- Treating diabetes in underserved populations using an interprofessional care team. *J Interprof Care*, doi: 10.3109/13561820.2014.917408, 2017

Recognitions

- Recognition for 8 years of service on the TAMU IRB
- Governmental commission (Gov. Abbott) to serve on the State Board of Pharmacy as an advisor in the Prescription Monitoring Program Committee, 2019
- Chancellor John Sharp Advisory Committee for PricewaterhouseCoopers (PwC) comprehensive review of TAMU Finance System

MERLYN JOSEPH

Awards

- Innovative Research Award; IPER-5 Poster Presentation, Texas A&M Health Sciences Center (October 2019)
- Innovation and Design for Exploration and Analysis in Teaching Excellence (IDEATE) Fellowship
- Teaching Team of the Year, IPT I: 2018 – 2019. Texas A&M Rangel College of Pharmacy

ANDREA MORA

Awards

- Teaching Team of the Year, IPT VII: Infectious Diseases, 2018-2019. Texas A&M Rangel College of Pharmacy
- Teaching Team of the Year, IPT VII: Infectious Diseases, 2017-2018. Texas A&M Rangel College of Pharmacy
- Faculty Preceptor of the Year, 2016-2017. Texas A&M Rangel College of Pharmacy
- Teacher of the Year. 2016-2017. Texas A&M Rangel College of Pharmacy
- Teaching Team of the Year, IPT VII: Infectious Diseases, 2016-2017. Texas A&M Rangel College of Pharmacy
- Teaching Team of the Year, IPT VII: Infectious Diseases, 2015-2016. Texas A&M Rangel College of Pharmacy
- Association of Former Students Distinguished Achievement Award for College Level Teaching, 2015. Texas A&M University

LADAN PANAHI

Awards

- Preceptor of the Year Award May 2020, Texas A&M College of Pharmacy
- Teaching Team of the Year Award for 2018-2019: IPT VII Infectious Diseases, May 2019
- Teaching Team of the Year Award for 2017-2018: IPT VII Infectious Diseases, May 2018
- Teaching Team of the Year Award for 2016-2017: IPT VII Infectious Diseases, May 2017
- Teaching Team of the Year Award for 2015-2016: IPT VII Infectious Diseases, May 2016
- Teaching Team of the Year Award for 2014-2015: IPT VII Infectious Diseases, May 2015

POOJA PATEL

Awards

- TSHP Poster Winner – Education Category, TSHP Annual Seminar, \$250 2020
- TSHP Poster Honorable Mention - TSHP Annual Seminar 2018

VICTORIA PHO

Awards

- Texans United Way Community Quarterback Award Finalist, December 2019 & \$5,000 reward for San Jose Charity Clinic to go towards patient care
- The White House President’s Volunteer Service Award – Gold, 2018-2019
- The White House President’s Volunteer Service Award – Silver, 2017-2018
- AACP Contribution as Chair Award, July 2015
- Texas A&M College of Pharmacy 5 Years Service Award

Fundraising

- Texas A&M Mai Nguyen Endowed Scholarship Fundraising - \$2,595 – 2021
- Texas A&M Mai Nguyen Endowed Scholarship Fundraising - \$26,250 – 2019
- Texas A&M Mai Nguyen Endowed Scholarship Seed & Contribution, \$26, 250 - 2018

NEPHY SAMUEL

Awards

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

GEORGE UDEANI

Grants

- Reducing healthcare workers absenteeism in SARS-CoV-2 Pandemic by Enhanced trained immune responses through Bacillus Calmette-Guerin vaccination, a randomized trial. Agency: TAMU in collaboration with Harvard, MD Anderson and Baylor College of Medicine; Funded for \$2,500,000 by TAMU Office of the Chancellor, Co-Investigator

Awards

- Preceptor of the Year Award, Texas A&M University Health Science Center, Rangel College of Pharmacy 2018-2019

JAYE WESTON

Awards

- HSC IPE Teaching award– 2020 Health Science Center Interprofessional Education and Research
- Faculty Preceptor of the Year 2017-2018
- IPE Faculty Leadership Recognition
- Teaching Team of the Year 2017-2018, Infectious Diseases, Irma Lerma Rangel Pharmacy Texas A&M University
- Teaching Team of the Year 2016-2017, Infectious Diseases, Irma Lerma Rangel Pharmacy Texas A&M University
- Teaching Team of the Year 2015-2016, Infectious Diseases, Irma Lerma Rangel Pharmacy Texas A&M University
- Teaching Team of the Year 2014-2015, Infectious Diseases, Irma Lerma Rangel Pharmacy Texas A&M University

Research Highlights

DR. JOY ALONZO

Dr. Alonzo's research during 2020 included a focus on telehealth innovation, developing strategies to augment rural emergency service organizations, opioid overdose and naloxone administration interventions, development of substance use disorder capacity, as well as development of interventions to facilitate COVID-19 testing and early infection detection. Highlights include BCBS Moonshot initiatives which culminated in the development of an unmanned remote healthcare station currently being evaluated for urgent and after hours care use cases. The TAMU healthcare station incorporates a pharmacy robot to facilitate after-hours pharmaceutical care. The healthcare station was used as part of the target County's COVID-19 care protocols.



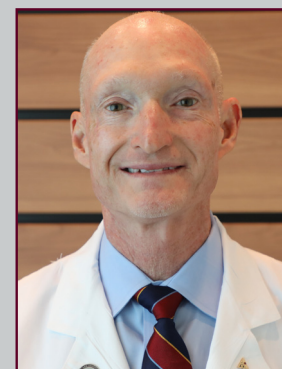
DR. FATIMA ALSHBOOL

Dr. Alshbool's research in the last couple of years have focused on the negative health impact of novel tobacco products in the context of occlusive cardiovascular disorders. She along with her team and collaborators were the first to document that e-cigarettes (vaping) and waterpipes directly increase the risk of thrombotic disease. Importantly, these detrimental effects also manifest when the exposure is thirdhand in nature. She has received funding from the National Institutes of Health to conduct some of these studies. These findings are expected to not only guide therapeutic approaches for managing tobacco-dependent thrombosis, but also inform policies for controlling exposure to novel tobacco products. Dr. Alshbool is also funded by the American Heart Association for a study that is centered on the structural biology of one of the platelet G-protein coupled receptors, namely 5HT2A receptor.



DR. GEORGE UDEANI, DR. THERESA OFILI, DR. ROBERT HUTCHISON, BCG TRIAL TEAM

Dr. George Udeani, Dr. Theresa Ofili and Dr. Robert Hutchison, BCG Trial Team, have been part of The

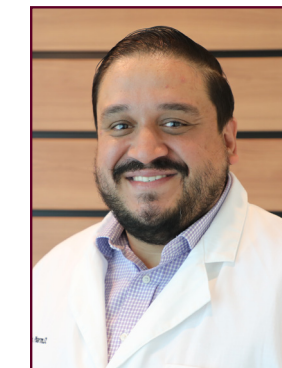


Bacillus Calmette-Guerin Vaccination as Defense Against SARS-CoV-2: A Randomized Controlled Trial to Protect Health Care Workers by Enhanced Trained Immune Responses. Dr. Udeani serves as Co-Investigator for the double-blind randomized controlled trial, along with other investigators from Texas A&M University (TAMU), Cedars-Sinai Medical Center, Baylor College of Medicine, M.D. Anderson Cancer Center and Harvard University. Dr Udeani and colleagues received \$2,500,000 through the TAMU Chancellor's Research Initiative (CRI) for this research.

Post-Graduate Programs

Texas A&M Rangel College of Pharmacy is affiliated with not only a postgraduate year 1 (PGY1) residency program with Doctors Hospital at Renaissance (DHR Health) but also has a postgraduate year 2 (PGY2) residency in internal medicine at Baylor Scott & White in Temple, Texas.

The residency program director for PGY1 at Doctors Hospital at Renaissance Health (DHR Health) is **Rene Verduzco PharmD, BCPS**



The residency program director for PGY2 at Baylor Scott & White is **Charlotte Farris PharmD, BCPS**



ACADEMIC TRAINING PROGRAM FOR RESIDENTS

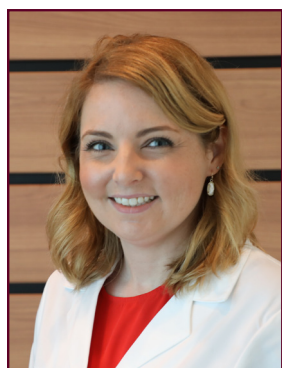
This academic training program is a 12-month longitudinal experience designed to teach PGY-1 and PGY-2 residents how to integrate effective educational techniques into a variety of learning experiences with diverse audiences. The program coordinators are faculty members Delaney Ivy and Charlotte Farris. The purpose of the training program is to provide current residents with effective education and training, through mentorship from current Texas A&M Rangel College 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, fifteen residents located throughout the state of Texas and 14 Texas A&M Rangel College 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 with enrollment for the upcoming academic year at a record high of 25 participating residents.

PARTICIPATING RESIDENTS

- Hanna Kim**
Corpus Christi Medical Center (CCMC), PGY1 Corpus Christi
- Joshua West**
Corpus Christi Medical Center (CCMC), PGY1 Corpus Christi
- Maria Delgado**
Corpus Christi Medical Center (CCMC), PGY1 Corpus Christi
- Matt Giese**
Corpus Christi Medical Center (CCMC), PGY1 Corpus Christi
- Tanner Hull**
VA Texas Valley Coastal Bend Health Care System, PGY1 Corpus Christi
- Sarah Mendez**
VA Texas Valley Coastal Bend Health Care System, PGY1 Corpus Christi
- Matthew Goode**
Doctor's Hospital at Renaissance (DHR), PGY1 Edinburg
- Lorena Gonzalez**
Doctor's Hospital at Renaissance (DHR), PGY1 Edinburg
- Caitlyn Clifton**
Albertsons, PGY1-community Houston
- Katherine Jacome-Cluff Raines**
TAMU Veterinary Medicine College Station
- Esteban Garcia**
Baylor Scott & White (BSW), PGY1 Temple
- Andrew Ramirez**
Baylor Scott & White (BSW), PGY1 Temple
- Sarah Eldred**
Baylor Scott & White (BSW), PGY2 Temple
- Kiersi Harmon**
Baylor Scott & White (BSW), PGY1- community Temple

Academic Training Program Coordinators

Delaney Ivy, PharmD, MSc, BCPS, CDE



Charlotte Farris PharmD, BCPS



PARTICIPATING FACULTY

- Mark Bremick**
- Adam Brown**
- Nephy Samuel**
- Rene Verduzco**
- Ladan Panahi**
- Anne-Cecile Mingle**
- Charlotte Farris**
- Delaney Ivy**
- Heather Hay**
- Pooja Patel**
- Daniela Bazan**
- Sandy Diec**
- Sandy Diec**
- Delaney Ivy**

TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER IRMA LERMA RANGEL COLLEGE OF PHARMACY PGY2 INTERNAL MEDICINE RESIDENCY PROGRAM

Sarah Eldred, PharmD

Sarah Eldred completed the Texas A&M PGY2 Internal Medicine residency program. She received her Doctor of Pharmacy from University of Mississippi. She then completed her postgraduate year 1 residency at University of Arkansas for Medical Sciences in Little Rock, Arkansas. After her completion of the PGY2 program, she will work as a clinical pharmacist at CHI St. Vincent Infirmary in Little Rock, Arkansas.



Primary Project Preceptor: Charlotte Farris, PharmD

RETROSPECTIVE COMPARISON OF APIXABAN VS. RIVAROXABAN VS. WARFARIN IN PATIENTS WITH ADVANCED CHRONIC KIDNEY DISEASE (CKD) AND ATRIAL FIBRILLATION OR VENOUS THROMBOEMBOLISM. Sarah Eldred, Charlotte Farris, Delaney Ivy, Hayatt Nafal, Megan Roberts, Texas A & M University College of Pharmacy & Baylor Scott and White Medical Center, Temple, Texas.

PURPOSE: The majority of the landmark randomized controlled trials evaluating direct oral anticoagulants (DOACs) in patients with atrial fibrillation or venous thromboembolism excluded patients with advanced chronic kidney disease (CKD). In this patient population, warfarin is considered the standard of care, but some data suggests that rivaroxaban and apixaban may be alternative options. The purpose of this study is to evaluate the efficacy and safety of apixaban vs. rivaroxaban vs. warfarin in patients with advanced CKD.

METHODS: This study will be submitted to the Institutional Review Board for approval. Data will be collected from the electronic medical record, which will identify patients with stage 4 and 5 chronic kidney disease, who were newly initiated on rivaroxaban, apixaban, or warfarin for non-valvular atrial fibrillation (AF) or venous thromboembolism (VTE). The following data will be collected: age, gender, weight, height, anticoagulation medication and dose, duration of anticoagulation, anticoagulation indication, comorbidities including coronary artery disease, heart failure, hypertension, history of stroke or transient ischemic attack (TIA), history of bleeding, diabetes, hyperlipidemia, peripheral artery disease. Additionally, the following information will be collected at the start of anticoagulation and at the time of event including creatinine clearance, hemoglobin, INR, platelets, concomitant therapy (aspirin, ticagrelor, clopidogrel, prasugrel, NSAIDs), CHA2DS2-VASc score, HAS-BLED score, Charlson Comorbidity Index, major bleeding event, source of bleeding and thrombotic event (recurrent VTE or stroke). The primary outcome will be the time to first major bleeding or thrombotic event. Secondary outcomes include time to first bleeding event, time to first thrombotic event and all-cause mortality. Patient's health information will be protected, and data recorded will not be shared with any individuals or institutions outside of the hospital system.

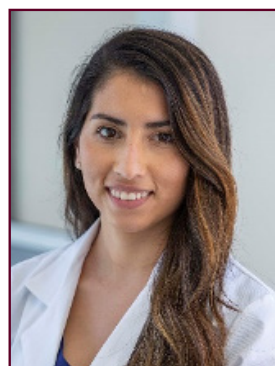
RESULTS: Research in progress

CONCLUSION: Research in progress

TEXAS A&M RANGEL COLLEGE OF PHARMACY PGY1 RESIDENCY PROGRAM WITH DOCTORS HOSPITAL AT RENAISSANCE HEALTH (DHR HEALTH)

Lorena Gonzalez PharmD

Lorena Gonzalez completed the Texas A&M affiliated PGY1 residency program. She attended the University of Texas Rio Grande Valley for her undergraduate studies and received her Doctor of Pharmacy from Texas A&M Rangel College of Pharmacy. After her completion of the PGY1 program, she will work as a clinical pharmacist at DHR Health in Edinburg, Texas.



Primary Project Preceptor: Daniela Bazan, PharmD and Rene Verduzco, PharmD

COVID-19 VENOUS THROMBOEMBOLISMS TRANSITIONS OF CARE: “TO BLEED OR NOT TO BLEED”

Lorena Gonzalez, Daniela Z. Bazan, Rene A. Verduzco Jr., Steve A. Rodriguez, Jonathon R. Cantu, Jose J. Hernandez, Texas A&M Irma Lerma Rangel College of Pharmacy, Kingsville, TX, DHR Health, Edinburg, TX

PURPOSE: Texas has been one of states hit the hardest by the COVID-19 pandemic, specifically accounting for 904,855 cases and 18,077 fatalities. Hidalgo county represents about 21% of Texas’ death rate. One of the most common causes of death in individuals infected with COVID-19 happens to be pulmonary embolism. Hypercoagulability is one of the abnormalities noted with individuals infected with COVID-19, however, the pathogenesis of the hypercoagulability is not completely understood. Studies have found that patients with COVID-19 have a higher risk of venous thromboembolism (VTE) events. As one of the areas highly impacted by COVID-19, the evaluation of anticoagulation within this population may give a better picture as to the best approach for the prevention of VTE events post hospitalization in these patients. The goal of this research project is to evaluate if they use an anticoagulant after a COVID-19 hospitalization is more effective at preventing post hospitalization VTE complications that no anticoagulation at all. Other objectives being evaluated will be potential adverse effects such as bleeding events. By better understanding these objectives, anticoagulants may be used more efficiently in those patients being discharged after a COVID-19 hospitalization.

METHODS: This study was approved by the DHR Health Institute for Research and Development Institutional Review Board and the Texas A&M University Institutional Review Board. A retrospective chart review will be conducted to identify patients that had a COVID-19 hospitalization, if they were mechanically ventilated at any point, if they were discharged on an anticoagulant, its dose, frequency, and any other pertinent clinical information. Patients from February 2020 to December 2020 will be collected and evaluated. The data collected will include the patient demographics, diagnosis, dose, frequency, and pertinent lab values. All data collected will be de-identified and be secured on an electronic file in the institutional system server with a password protected file. The data collected will be used to determine if use of an anticoagulant after a COVID-19 hospitalization is more effective at preventing post-hospitalization VTE complications than no anticoagulation at all and its potential rate of adverse effects on the body. Our primary endpoint will be venous thromboembolic events, while the secondary endpoint will look at bleeding events and well as overall mortality.

RESULTS: Research in progress

CONCLUSION: Research in progress

Matthew Goode, PharmD

Matthew Goode completed the Texas A&M affiliated PGY1 residency program. He attended University of The Incarnate Word for his undergraduate studies and for his Doctor of Pharmacy degree. After his completion of the PGY1 program, he will work as a medication reconciliation pharmacist at Methodist Health System in San Antonio, Texas.



Primary Project Preceptor: Daniela Bazan, PharmD and Rene Verduzco, PharmD

MANAGEMENT OF OUTPATIENT URINARY TRACT INFECTIONS FROM THE EMERGENCY DEPARTMENT.

Matthew J. Goode, Ronnie Ozuna, Daniela Bazan, Rene Verduzco, Jose Hernandez, DHR Health/Texas A&M College of Pharmacy, Edinburg, Texas.

PURPOSE: The purpose of this study was to evaluate prescribing patterns of oral antibiotics, antimicrobial resistance rates, interventions performed when urinary cultures showed resistance to empiric therapy, and readmission due to recurrent urinary tract infection (UTI) in patients who were managed on an outpatient basis for UTI from the emergency department (ED).

METHODS: A retrospective single-center cohort study was conducted for all patients who presented ED and managed on an outpatient basis for a UTI. A retrospective chart review was conducted for patients who had a positive urine source culture from October 1, 2019 to October 1 2020. Data collected from the electronic medical record (EMR) included patient demographics, medication allergies, urine culture and susceptibility reports, urinalysis findings, renal laboratory values, the empiric antibiotic prescribed, documented interventions related to antibiotic resistance and patient contact for change in therapy, and readmission due to recurrent UTI. The primary outcome was resistance to empiric oral antibiotic therapy based on urine culture and susceptibility reports. The secondary outcomes analyzed were if an antibiotic susceptibility mismatch occurred was there a documented intervention for change in therapy, for changes in therapy was there documentation of patient contact, for readmissions due to recurrent UTI was the process of patient contact utilized after the previous ED visit, and to evaluate if there is opportunity to utilize oral non-fluoroquinolone options based on accumulated susceptibility data.

RESULTS: Out of 1900 visits, 522 met the inclusion criteria. Organism-medication mismatch occurred in 285 ED visits (65.33%). For the visits with a resultant inappropriate therapy, 13 of 285 (4.56%) had documentation as to patient contact or notation outpatient follow-up. For 30-day readmission there was 17 visits (3.25%), with only one of these visits having documentation in the setting of inappropriate therapy.

CONCLUSION: Based on the study results, inappropriate empiric therapy needs to be intervened upon. The method of patient contact and documentation needs to be standardized and education given to the relevant medical staff.

Acknowledgements

ANNUAL REPORT WORKING GROUP

Dr. Joy Alonzo

Mr. Daniel Freeman

Dr. Robert Hutchison

Dr. Andrea Mora

Dr. Frank North

Dr. Theresa Ofili

Dr. Ladan Panahi

Ms. Shelby Purdy

Dr. George Udeani



TEXAS A&M UNIVERSITY

Irma Lerma Rangel
College of Pharmacy