



College of Pharmacy
UNIVERSITY OF HOUSTON

Report to the
Texas Pharmacy Congress
May 12, 2023

Ph.D. Students Take Top Presentation Awards at AMCP, APhA

Two UH College of Pharmacy Ph.D. students recently earned national awards for their research presentations at the Academy of Managed Care Pharmacy and the American Pharmacists Association annual meetings.

Bilqees Fatima, Pharm.D., M.S., received the Best Poster Award in the Graduate Student category at AMCP 2023 March 21-23 in San Antonio for her retrospective study of medication nonadherence factors among



Bilqees Fatima

older adult atrial fibrillation (AF) patients.

Fatima's research confirmed one-year adherence among DOAC users is suboptimal, but the identified predictors of nonadherence, such as low-income subsidy and age, should be taken into consideration when developing future interventions.

The study was co-authored by Anjana Mohan, Ph.D., a recent UHCOP graduate and current observational research manager at Amgen, and faculty advisor Susan Abughosh, Ph.D., UHCOP professor.

At the 2023 APhA Meeting in Phoenix, fellow Ph.D. student **Olajumoke Olateju** was honored with the Best Podium Presentation Award for her study into the trends and barriers to first-line treatment with immune checkpoint inhibitors (ICI).

Immunotherapy treatment is now considered the standard of care in metastatic

melanoma patients, yet it continues to be underutilized among traditionally underserved patient populations. The study found that a patient's socioeconomic status can act as a barrier when attempting to utilize immunotherapy.

Co-authors of the study were fellow Ph.D. student Zhen Zeng and faculty members E. James Essien, M.D., DrPH, Osaro Mgbere, Ph.D., M.S., MPH, and Douglas Thornton, Ph.D., Pharm.D.



Olajumoke Olateju

TSHP Seminar Yields Awards for Leadership, Research, Skills and Mentorship

Success and sand were in the mix as UHCOP student and faculty were honored at the 2023 Texas Society of Health-System Pharmacists Annual Seminar April 21-23 in Galveston.

For a second consecutive year, a UHCOP team – including three repeat members – won the TSHP Research & Education Foundation Leadership Challenge for its proposals aimed at reducing vacancies/preventing turnover, boosting morale and job satisfaction, and expanding and diversifying career ladders within pharmacy technician ranks.

Pharm.D. candidate **Isabella Serrato** won the Research Poster Competition-Student category for her presentation, "Quality Improvement Project: Impact Of Pharmacist-Led Medication Reconciliation In The Pediatric Camp Setting." Project co-authors were alumni Briget Martinez, Pharm.D., BCPPS, MASPMM, DHR Health pediatric clinical pharmacy specialist/UHCOP clinical assistant professor, and Katy Oliveira, Pharm.D., DHR Health pharmacist.



Members of the winning Leadership Challenge team were Emmanuel Iruru, Dana Elder, Adam Siddique and Michael Torano.

Amrita Kanwar, Pharm.D., Baylor St. Luke's Medical Center PGY1 resident/UHCOP student in The Houston Program (THP), received an Honorable Mention in the poster competition's PGY1 Resident/Fellow/Post-Graduate category for "Evaluation of rituximab prescribing patterns in a quaternary academic medical center." Project co-authors were alumna Kimberly Putney, Pharm.D., MPH, St. Luke's Health pharmacy manager and HSPAL director, and Raymond Yau, Pharm.D., St. Luke's

Health clinical pharmacy specialist-liver transplant.

Tien Pham was a member of the first-place P4 Category team in the Clinical Skills Competition.

Divya Varkey, Pharm.D., M.S., UHCOP clinical associate professor and college director of THP, received the Pharmacy Mentor Award and presented the Joyce A. Tipton Leadership Lecture created in honor of longtime pharmacy leader and UHCOP alumna Joyce Tipton, B.S., MBA, FASHP.

Student News

The UHCOP Chapter of the **Industry Pharmacists Organization** took home the bronze medal for its innovative development in the Value of Industry Pharmacists Case Competition, marking the team's second third-place finish in the past three years.

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Adam Siddique, Pharm.D. student, has been appointed to the 2023-24 Pharmacy Student Forum Executive Committee of the American Society of Health-System Pharmacists.

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Jennifer Lee and **Elizabeth Nguyen**, third-year Pharm.D. students, won first place in the Student National Pharmaceutical Association (SNPhA) Region III, IV & V Conference Clinical Skills Competition, with **Van Vo** and **Connie Lau**, second-year Pharm.D. students, placing third. In addition, the UHCOP SNPhA Chapter won the "Man-Mile Award," which is based on the number of members in attendance and the distance traveled to the host city.

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UHCOP and the **Phi Lambda Sigma Pharmacy Leadership Society Upsilon Chapter** welcomed Thomas Roduta, Pharm.D., M.S., BCPS, Memorial Hermann Memorial City Medical Center pharmacy operations manager and The Houston Program alumnus, for his presentation at the 2023 James T. McCarty Leadership Lecture.

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The **Hispanic Pharmacy Student Association** was recognized with the Outstanding Program Award by the UH Center for Student Involvement's 38th Annual Campus Leaders Ceremony April 19 for its work reducing vaccine hesitancy in Houston's Hispanic community.

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Rudesha Sanders, second-year Pharm.D. student, has accepted one of 40 slots at the 2023 NCPA Foundation-University of Arkansas for Medical Sciences Pharmacy Ownership and Leadership

Academy in Little Rock, Ark. The week-long academy will prepare attendees for owning a pharmacy, leadership development and practices for the NCPA Business Plan competition.

PLS Upsilon Ties for 1st Place in National Leadership Challenge

For the first time in its history, the UHCOP Upsilon Chapter of the Phi Lambda Sigma Leadership Society tied for first place in the national PLS Leadership Challenge for its program "Creating Lasting Change."

As part of its initiative, the UHCOP chapter created a certification program incentivizing and encouraging students with the chance to win a \$300 scholarship for learning about diversity and leadership styles in health care. The program will be implemented in the next academic year.

Upsilon shared first-place honors with the PLS Alpha Chapter of Auburn University Harrison School of Pharmacy.

In addition to the Leadership Challenge success, Upsilon was also a finalist for Chapter of the Year, which it claimed last year as its third title in the past seven years.



The 2022-2023 officers of UHCOP Phi Lambda Sigma, from left, Sarah Garcia-Plouch, leadership challenge chair, Raina Abraham, vice president, Yasmeeen Bharde, president, and Yashvi Patel, treasurer.

College News

New Research Center Focuses on Population Health, Pharmacoepidemiology

The Center for Population Health Outcomes and Pharmacoepidemiology Education and Research (P-HOPER Center) has been launched at UHCOP with the goal of improving population health outcomes through education, research and service initiatives focused on the multidisciplinary field of pharmacoepidemiology.

The center is led by Director Rajender R. Aparasu, Ph.D., FAPhA, Mustafa & Sanobar Lokhandwala Endowed Professor and chair of the college's Department of Pharmaceutical Health Outcomes and Policy. The center's other inaugural members are fellow faculty members Hua Chen, Ph.D., M.D.,



The P-HOPER Center is led by Rajender Aparasu, Ph.D., FAPhA, director, and Hua Chen, M.D., Ph.D., assistant director.

who also serves as assistant director; Susan Abughosh, Ph.D., professor; E. James Essien, DrPH, M.D., professor; and Jeffrey Sherer, Pharm.D., BCGP, clinical professor.

The center is the first of its kind in the nation to study population health outcomes through the lens of pharmacoepidemiology, as most population health centers in the U.S. geared toward overall public health perspectives.

Aparasu said the center is uniquely positioned to strengthen the partnership between public health and pharmacy, help remove the barriers to collaborations, and promote the integration of population-based pharmaceuticals outcomes assessment into community health needs assessments, disease surveillance, and monitoring of health outcomes."

Kumar Receives \$2.7M NIH Grant for Muscle Wasting Study

Ashok Kumar, Ph.D., Else and Philip Hargrove Endowed Professor and chair of the Department of Pharmacological and Pharmaceutical Sciences, received a five-year, \$2,758,100 National Institute of Arthritis and Musculoskeletal and Skin Disease grant to examine the TWEAK/Fn14 system in skeletal muscle wasting during aging and cancer cachexia.

Kumar hopes to identify mechanisms that could lead to the developing therapeutic approaches to prevent muscle wasting. Co-investigators of this project include UHCOP faculty member Michael Johnson, Ph.D., and Moores professor in the UH College of Natural Sciences and Mathematics Preethi Gunaratne, Ph.D.

an AAPP Foundation Student Registration Grant to present her project “Picking the Brain: Treatment of Amphetamine/Dextroamphetamine Induced Excoriation Disorder,” coauthored by fellow student Mackenzie Luke and De La Cruz, at the meeting.

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Tahir Hussain, Ph.D., FAHA, FASN, associate dean for research and graduate programs and Joseph P. and Shirley Shipman Buckley Endowed Professor, was honored with the Association of Scientists of Indian Origin in America 2023 Mario Toppo Distinguished Scientist Award at the organization’s 41st Annual Meeting April 22.

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Ashna Talwar, Ph.D. candidate and **Javeria Khalid**, Ph.D. student, received ISPOR Student Travel Grants to present their research at ISPOR 2023 May 7-10 in Boston, Mass. Talwar’s project was on “Cumulative Anticholinergic Burden and Its Predictors Among Older Adults with Alzheimer’s Disease Initiating Cholinesterase Inhibitors,” and Khalid’s presentation was on “Marginal Health Care Expenditure of Patients with Viral Hepatitis in the U.S.: Analysis of Medical Expenditure Panel Survey (2011-2020).”

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MariVi Tejada-Simon, Ph.D., M.Ed, UHCOP Hispanic Pharmacy Student Association co-advisor and associate professor, received the Outstanding Advisor Award at the UH Center for Student Involvement’s 38th Annual Campus Leaders Ceremony April 19.

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Three UHCOP faculty members were among the honorees at the 2023 UH Faculty Excellence Awards, which were presented May 3 by the UH Associate Vice President of Academic Affairs & Provost. The UHCOP award recipients were: **Bradley McConnell**, Ph.D., FAHA, professor – Outstanding Graduate Mentor; **Meghna Trivedi**, Ph.D., Pharm.D., associate professor – Undergraduate Research Mentor; and **Joshua Wollen**, Pharm.D., clinical assistant professor – Teaching Excellence Award-Instructional/Clinical.

Diana S-L. Chow, Ph.D., Paula & John J. Lovoi Sr. Endowed Professor in Drug Discovery and Development, was honored as the University of British Columbia’s Pharmaceutical Sciences Alumni Agent of Change, which recognizes UBC alumni who have made significant contributions to their field and community,

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Austin De La Cruz, Pharm.D., BCPP, and Pharm.D. candidate coauthors **Leslye Echeverria**, **Sukaina Makzoumi** and **Alexis Nguyen** were honored as the Therapeutic Case Report Award finalists for their presentation, “A Search and Seizure for Relief- The Effective Pharmacological Treatment of Psychogenic Non-Epileptic Seizures (PNES) with Escitalopram,” at the 2023 American Association of Psychiatric Pharmacists Annual Meeting April 16-19 in Atlanta, Ga. In addition, Pharm.D. student **Ashlyn Pulliam** received

Symposium Presents Evidence, Practice Updates in Geriatric Medication Safety

More than 100 practitioners, researchers, students and post-graduate trainees shared insights into safe, effective medication use in older adults at the 2023 Geriatric Medication Safety Symposium April 13-14 in Houston’s Texas Medical Center.

Supported by a five-year National Institute on Aging grant, the symposium was co-hosted by UH College of Pharmacy and McGovern Medical School at UTHealth Houston. Based on this

year’s theme of “Team-Based Care to Bridge the Divide in Cognitive Decline,” the hybrid event featured workshops and plenary sessions from nationally recognized speakers presenting diverse perspectives in diagnosis, pharmacotherapy, behavior management, and caregiver roles.

Among the lineup were Ryan M. Carnahan, Pharm.D., M.S., professor and director of graduate studies at The University of Iowa College of Public Health; Carolyn K. Clevenger, R.N., DNP, AGPCNP-BC, GNP-BC, FAANP, professor and associate dean for Transformative Clinical Practice at Emory University Nell Hodgson Woodruff School of Nursing; Katie Scott, MPH, president of the Houston-based nonprofit organization CarePartners; and Joseph W. Shega, M.D., executive vice president and chief medical officer of VITAS Healthcare.

The event also drew four podium and 10 poster presentations from students, residents, fellows and post-doctoral trainees from institutions across the Greater Houston area – an increase of more than 80% from the symposium’s inaugural year in 2022.



Recent Publications

- New steps on an old path: Novel estrogen receptor inhibitors in breast cancer. Pagliuca M, Donato M, D'Amato AL, Rosanova M, Russo AOM, Scafetta R, De Angelis C, **Trivedi MV**, André F, Arpino G, Del Mastro L, De Laurentiis M, Puglisi F, Giuliano M. *Crit Rev Oncol Hematol*. 180:103861, 2022. PMID: 36374739. DOI: 10.1016/j.critrev-onc.2022.103861
- Identifying predictors of generalized anxiety among student pharmacists in response to the COVID-19 pandemic. **El-Desoky R, De La Cruz A, Thornton JD, Wanat MA, Varkey D**. *Curr Pharm Teach Learn*. 2023 Jan;15(1):34-42. doi: 10.1016/j.cptl.2023.02.005. Epub 2023 Feb 28. PMID: 36898886
- Clinical characteristics, microbiology and outcomes of a cohort of patients treated with ceftolozane/tazobactam in acute care inpatient facilities, Houston, Texas, USA. Tran TT, Cabrera NL, **Gonzales-Luna AJ**, Carlson TJ, Alnezary F, Miller WR, Sakurai A, Dinh AQ, Rydell K, Rios R, Diaz L, Hanson BM, Munita JM, Pedroza C, Shelburne SA, Aitken SL, **Garey KW**, Dillon R, Puzniak L, Arias CA. *JAC Antimicrob Resist*. 2023 Jan 2;5(1):dlac131. doi: 10.1093/jacamr/dlac131. eCollection 2023 Feb. PMID: 36601551
- Comparison of the ligand binding site of C1 domains: a molecular dynamics simulation study of the C1 domain-phorbol 13-acetate-membrane system. **You Y, Mathukumali K, Das J**. *J Biomol Struct Dyn*. 2023 Jan 5:1-14. doi: 10.1080/07391102.2022.2163699. Online ahead of print. PMID: 36602779
- Nonmammalian models to study *Clostridioides difficile* infection; a systematic review. **Hu C, Garey KW**. *Anaerobe*. 2023 Jan 7;79:102694. doi: 10.1016/j.anaerobe.2023.102694. Online ahead of print. PMID: 36626950
- Impact of CDK4/6 inhibitors on chemotherapy utilization in earlier therapy lines for HR+/HER2- metastatic breast cancer in the United States. **Goyal RK, Holmes HM, Chen H, Abughosh S, Candrilli SD, Johnson ML**. *Breast Cancer Res Treat*. 2023 Jan 7. doi: 10.1007/s10549-022-06845-4. ONLINE AHEAD OF PRINT. PMID: 36609900
- Investigation of racial differences in survival from non-small cell lung cancer with immunotherapy use: A Texas study. **Olateju OA, Zeng Z, Adenaiye OO, Varisco TJ, Zakeri M, Sujit SS**. *Front Oncol*. 2023 Jan 9;12:1092355. doi: 10.3389/fonc.2022.1092355. eCollection 2022. PMID: 36698397
- Contribution of Hepatic Steatosis-Intensified Extracellular Vesicle Release to Aggravated Inflammatory Endothelial Injury in Liver-Specific Asah1 Gene Knockout Mice. Yuan X, Bhat OM, Zou Y, **Zhang Y**, Li PL. *Am J Pathol*. 2023 Apr;193(4):493-508. doi: 10.1016/j.ajpath.2022.12.007. Epub 2023 Jan 10. PMID: 36638912
- Baseline stool toxin concentration is associated with risk of recurrence in children with *Clostridioides difficile* infection. Sandora TJ, Kociolek LK, Williams DN, Daugherty K, Geer C, Cuddemi C, Chen X, Xu H, Savage TJ, Banz A, **Garey KW, Gonzales-Luna AJ**, Kelly CP, Pollock NR. *Infect Control Hosp Epidemiol*. 2023 Jan 10:1-7. doi: 10.1017/ice.2022.310. Online ahead of print. PMID: 36624698
- Emerging Options for the Prevention and Management of *Clostridioides difficile* Infection. **Gonzales-Luna AJ**, Carlson TJ, **Garey KW**. *Drugs*. 2023 Jan 16:1-12. doi: 10.1007/s40265-022-01832-x. Online ahead of print. PMID: 36645620
- Acceptance of COVID-19 vaccination in a sample of Middle Eastern and North African (MENA) Houston residents. **Atrooz F, Majd Z, Alrousan G, Zeidat S**, Abuelezam NN, **Abughosh S, Salim S**. *PLOS Glob Public Health*. 2023 Feb 1;3(2):e0001441. doi: 10.1371/journal.pgph.0001441. eCollection 2023. PMID: 36962927
- Understanding Mental Health Status of Syrian Refugee and Jordanian Women: Novel Insights from a Comparative Study. **Atrooz F**, Aljararwah SM, Chen TA, Khabour OF, **Salim S**. *Int J Environ Res Public Health*. 2023 Feb 8;20(4):2976. doi: 10.3390/ijerph20042976. PMID: 36833672
- Overall survival associated with CDK4/6 inhibitors in patients with HR+/HER2- metastatic breast cancer in the United States: A SEER-Medicare population-based study. **Goyal RK, Chen H, Abughosh SM**, Holmes HM, Candrilli SD, **Johnson ML**. *Cancer*. 2023 Apr 1;129(7):1051-1063. doi: 10.1002/cncr.34675. Epub 2023 Feb 9. PMID: 36760031
- Emerging role of TAK1 in the regulation of skeletal muscle mass. **Roy A**, Narkar VA, **Kumar A**. *Bioessays*. 2023 Apr;45(4):e2300003. doi: 10.1002/bies.202300003. Epub 2023 Feb 15. PMID: 36789559
- Growth of *Acinetobacter baumannii* impacted by iron chelation. **Eales BM, Bai B, Merlau PR, Tam VH**. *Lett Appl Microbiol*. 2023 Feb 16;76(2):ovad019. doi: 10.1093/lambio/ovad019. PMID: 36731874
- Breast Cancer Beliefs and Screening Practices among Syrian Refugee Women and Jordanian Women. **Atrooz F**, Aljararwah SM, Acquati C, Khabour OF, **Salim S**. *Int J Environ Res Public Health*. 2023 Feb 18;20(4):3645. doi: 10.3390/ijerph20043645. PMID: 36834339
- Preservation of the Innate Immune Response to *Clostridioides difficile* Infection in Hospitalized Immunocompromised Patients. Banegas M, Villafuerte-Gálvez J, Paredes R, Sprague R, Barrett C, **Gonzales-Luna AJ**, Daugherty K, **Garey KW**, Xu H, Lin Q, Wang L, Chen X, Pollock NR, Kelly CP, Alonso CD. *Open Forum Infect Dis*. 2023 Feb 18;10(3):ofad090. doi: 10.1093/ofid/ofad090. eCollection 2023 Mar. PMID: 36949876
- A Motivational Interviewing Intervention to Improve Adherence to ACEIs/ARBs among Nonadherent Older Adults with Comorbid Hypertension and Diabetes. **Mohan A, Majd Z, Johnson ML, Essien EJ**, Barner J, Serna O, Gallardo E, Fleming ML, **Ordonez N**, Holstad MM, **Abughosh SM**. *Drugs Aging*. 2023 Apr;40(4):377-390. doi: 10.1007/s40266-023-01008-6. Epub 2023 Feb 27. PMID: 36847995
- A novel method to evaluate ceftazidime/avibactam therapy in patients with carbapenemase-producing Enterobacteriaceae (CPE) bloodstream infections. Gatti M, **Tam VH**, Gaibani P, Cojutti PG, Viale P, Pea F. *Int J Antimicrob Agents*. 2023 Apr;61(4):106760. doi: 10.1016/j.ijantimicag.2023.106760. Epub 2023 Feb 18. PMID: 36804371
- Peripheral eosinophil trends and clinical outcomes after non-traumatic subarachnoid hemorrhage. Gonzalez Gomez H, Savarraj JJP, Paz AS, Ren X, Chen H, McCullough LD, Choi HA, Gusdon AM. *Front Neurol*. 2023 Feb 21;14:1051732. doi: 10.3389/fneur.2023.1051732. eCollection 2023. PMID: 36895904
- Innately expressed estrogen-related receptors in the skeletal muscle are indispensable for exercise fitness. Sopariwala DH, Rios AS, Pei G, **Roy A, Tomaz da Silva M**, Thi Thu Nguyen H, Saley A, Van Drunen R, Kralli A, Mahan K, Zhao Z, **Kumar A**, Narkar VA. *FASEB J*. 2023 Feb;37(2):e22727. doi: 10.1096/fj.202201518R. PMID: 36583689
- Successes and challenges in implementing specifications grading in skills-based laboratory courses: Experiences at two colleges of pharmacy. Joseph ML, Miller SW, **Diec S**, Augustine JM. *Curr Pharm Teach Learn*. 2023 Mar 8:S1877-1297(23)00025-4. doi: 10.1016/j.cptl.2023.02.025. Online ahead of print. PMID: 36898890
- Surveillance of *Clostridioides difficile* antimicrobial resistance in the United States. **Gonzales-Luna AJ**, Dureja C, **Eubank TA, Garey KW**, Hurdle JG. *Clin Infect Dis*. 2023 Mar 8:ciad135. doi: 10.1093/cid/ciad135. Online ahead of print. PMID: 36883582