### UNIVERSITY of HOUSTON

**COLLEGE OF PHARMACY** 







Report to the Texas Pharmacy Congress — August 20, 2020

## **APhA-ASP Chapter Nets High Honors at Nationals**

### 2nd Consecutive P4 Cracks Patient Counseling Competition Top 10

UHCOP's American Pharmacists Association-Academy of Student Pharmacists Chapter experienced one of its most successful years in national award recognition during the APhA 2020 Virtual Meeting April 26-May 1.

The chapter secured a 2nd Runner-up Award in the Division AA



2020 and 2019, respectively.

Sisters Melissa Mirjamali and Sara Mirjamali were Na- A UHCOP APhA-ASP Chapter member quizzes a child tional Patient Counseling Competition Top 10 finalists in on the "Candy vs. Medicine" medication safety display during a 2019 back-to-school event.

For the Women's Health Project campaign, the chapter

health.

was also recognized for a second consecutive time as a "Top 4" project in a separate category for the campaign. In

Project campaign to

educate members

and the public on

such topics as HPV

awareness, cancer and reproductive

addition, the chapter was honored with a 2nd Runner-up Award in the OTC Medication Safety category, which encompassed about 40 events and activities reaching more than 2,100 adults and schoolchildren.

UHCOP has the possibly history-making distinction of back-to-back sibling Top 10 finishers in the National Patient Counseling Competition. May 2020 Pharm.D. graduate Melissa Mirjamali was recognized among the nation's elite counselors during the APhA 2020 Virtual Meeting. Sister Sara Mirjamali, a 2019 UHCOP Pharm.D. graduate now in the second year of The Houston Program, finished in second place at the 2019 competition.

Overall Chapter category, the highest in its history.

Among the chapter's highlights during the 2018-19 academic year were providing more than 7,000 direct patient interactions through wellness screenings and education; organizing the first Heart Hustle 5K run/walk event at UH, which raised \$2,421 for the American Heart Association and offered free wellness screenings and education to participants; participating in advocacy activities surrounding the 86th Texas Legislature and the Texas Pharmacy Association-sponsored Texas Pharmacy Day at the Capitol, including voter registration drives and contacting legislators; and hosting a comprehensive Women's Health

### Li Awarded \$2.2M NIH Grant to Study Enzyme in Obesity-induced CV Disease

Xiang Li, Ph.D., UHCOP research assistant professor of Pharmacology, has received a fiveyear, \$2.2 million National Institutes of Health grant to investigate the role of the enzyme acid sphingomyelinase (ASM) in altering lipid metabolism in endothelial cells, leading to obesity-induced endothelial dysfunction and vascular injury and artery hardening.

Li has hypothesized that loss of endothelial enhancer of zeste homolog 2 (Ezh2) function upregulates ASM gene expression and augments ceramide production under hyperlipidemic conditions, which trigger Nlrp3 inflammasome activation and produce endothelial injury resulting in subsequent neointimal



lesions on the carotid arterial wall.

"We successfully developed tissue-specific transgenic models that we can delete or overexpress the epigenetic enzyme gene only in the endothelial cells," Li said. "The findings will help us better understand the cause of vascular injury and artery hardening that start within cells at the very early stage of patients with obesity. We hope that these mechanistic studies will give us an opportunity to identify new molecular targets that may help develop therapeutic strategies for treatment or prevention of obesity-induced cardiovascular diseases."

Li's co-investigators are Tahir Hussain, Ph.D., UHCOP Joseph P. and Shirley Shipman Buckley Endowed Professor of Drug Discovery, and Li Chen, UH assistant professor of biology and biochemistry.

# IPhO Team Captures 3<sup>rd</sup> in National Value in Pharmacists Case Competition

A team of UHCOP Pharm.D. students finished third among more than 40 other chapter submissions in the national 2019-20 Industry Pharmacists Organization (IPhO) Value in Pharmacists (VIP) Case Competition. The competition involves teams covering drug development from many perspectives, including clinical sciences, regulatory affairs, commercial/marketing, and medical affairs, in which pharmacists most frequently contribute to the "bench-to-market" development of a drug.

Each participating school is given the same case and drug, which for the 2019-20 competition was a treatment for triple-negative breast cancer patients. Preclinical studies demonstrated safety comparable with similar medications on the market, so the teams were tasked with developing the human clinical study protocol and file an investigational new drug application with the FDA.

Among the competition's goals are to demonstrate the value of industry pharmacists; create a cohesive drug development plan; and provide diverse exposure to student pharmacists and allow them to explore new areas, think critically, and expand their network.

**Masa Abdo**, Pharm.D. student, and **Jared Sheneman**, Pharm.D. candidate, were awarded a 2020 TPF General Scholarship and the 2020 Larry "Neal" McClaugherty Scholarship, respectively, from the Texas Pharmacy Foundation.

**Precious Anyanwu**, Ph.D. student, and **Celine Zhong**, Pharm.D., 2019-20 Academic Pharmacy Fellow, were named 2020 American Association of Colleges of Pharmacy AACP/Walmart Scholars.

Ph.D. students **Soumya Chikermane**, **Prajakta Masurkar**, and **Soham Yande** completed remote internships with Novartis, Intuitive Surgical and Kite Pharma, respectively, during summer 2020.

**Emily (Emy) Cooper**, Pharm.D. candidate, has been elected 2020-21 National Recording Secretary of the Student National Pharmaceutical Association. Cooper also is a finalist for the 2019-20 SNPhA J.B. Hills Chapter President of the Year Award.

**Susan Dembny**, Pharm.D. candidate, has been appointed to the American Pharmacists Association-Academy of Student Pharmacists' 2020-21 National Executive Committee Speaker of the House and member of the APhA-ASP Policy Standing Committee.

**Amanda Gee**, Pharm.D. candidate, has been appointed to the American Society of Health-System Pharmacists' new Residency Preparation Advisory Group.

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# 2nd Consecutive Honorable Mention in P&T Event for AMCP Team

For the second consecutive year, a team of five UHCOP Pharm.D. students has been recognized as an Honorable Mention semifinalist in the Academy of Managed Care Pharmacists (AMCP) 2020 National Pharmacy & Therapeutics (P&T) Competition.

Organized by the AMCP Foundation, the competition is designed to introduce students to the work of pharmacists on the formulary team, including "how to evaluate the best available scientific, clinical, and economic evidence on medication use" and "determine the impact of medication use on patient population outcomes, conduct cost/benefit analyses, and relate drug therapy choices to current practice guidelines," according to the AMCP Foundation website.

In the competition, every team prepares a written evaluation of the competition drug and an oral summary presentation with supporting slides. A panel of judges determines which teams advance to the finals or earn honorable mentions as semifinalists.

**Alyza King**, Pharm.D. candidate, has been appointed chair of the National Student Pharmacist Committee of the Association of Managed Care Pharmacy.

**Lamees Loubani**, Pharm.D. student, has been appointed 2020-21 Region VI Liaison of the Phi Lambda Sigma Pharmacy Leadership Society.

**Amilda Medina**, who completed her Pharm.D. degree in May, has been appointed to the 2020-21 Texas Society of Health-System Pharmacists Transitions of Care Certificate Program Task Force.

**Eileell Alin Nguyen,** Pharm.D. candidate, has been appointed Member At-large on the American College of Clinical Pharmacy National Student Network Advisory Committee.

**Jennifer Nguyen** and **Jason Le**, Pharm.D. candidates, were appointed 2020-21 chief national student officer and Southwest region student officer, respectively, in the Industry Pharmacists Organization.

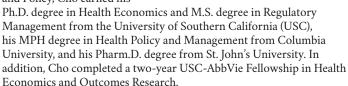
**Hanan Qasim**, Pharmacology Ph.D. student, has been appointed as the Predoctoral Representative on the American Society of Pharmacology and Experimental Therapeutics (ASPET) Cardiovascular Pharmacology Division Executive Committee.

**Soham Yande**, PHOP Ph.D. candidate, has been appointed co-chair of the ISPOR Student Network's Meeting Planning Committee, which is responsible for student programming at upcoming meetings.

### COLLEGE WELCOMES CHO, GARZA AND WEN TO FACULTY

UHCOP recently welcomed three new faculty members to the college: Sang Kyu Cho, Pharm.D., MPH, Ph.D., Karina Garza, Pharm.D., and Yefei Wen, DVM,

Appointed as an assistant professor in the Department of Pharmaceutical Health Outcomes and Policy, Cho earned his



His research interests include economic evaluation of pharmaceutical products and medical interventions, health policy simulation, data analysis using electronic health records, and opioids, cancer, Alzheimer's disease, and chronic wounds. His research has been published in such peer-reviewed journals as Pharmacoeconomics, Leukemia & Lymphoma, and Clinical Colorectal Cancer, and presented at meetings of the American Society of Clinical Oncology, the European Hematology Association Congress, ISPOR, and the American Society of Health-System Pharmacists.

A graduate of The University of Texas College of Pharmacy/UT-Pan American (now UT Rio Grande Valley) Pharm.D. program, Garza has been appointed as a clinical assistant professor in the Department of Pharmacy Practice and Translational Research as part of the Rio Grande Valley Pharm.D. Satellite Program.







After graduation, Garza joined Knapp Regional Medical Center in Weslaco as a clinical pharmacist. Two years later, Garza joined Prime Mission Regional Medical Center in Mission, where she served in clinical pharmacy and pharmacy management/leadership positions over eight years.

Her past professional activities include serving as president-elect/president of the Rio Grande Valley Society of Health-System Pharmacists. In addition to her UHCOP posts, Garza serves as clinical pharmacist at Satellite Program partner DHR Health in Edinburg.

Appointed as a research assistant professor in the Department of Pharmacological and Pharmaceutical Sciences, Wen earned his DVM in Animal Husbandry and Veterinary Medicine from Northwest University for Nationalities in Gansu, China; master's degree in Clinical Veterinary from Northwest A&F University in Shaanxi, China; and Ph.D. in Cell Biology from the Academy of Military Medical Sciences in Beijing, China. Wen also completed postdoctoral training at Baylor College of Medicine, UTHealth and Purdue University.

Wen's research interests include mechanisms of skeletal muscular regeneration; regulation of skeletal muscle atrophy and hypertrophy; diabetes and nutrients metabolism in skeletal muscle; muscle stem cells and tissue engineering; and gametogenesis, embryogenesis, and fetal development. He has authored/coauthored papers in such peerreviewed journals as the Journal of Molecular Cell Biology, Theranostics, Nature Communications, Frontiers in Cell and Developmental Biology, and PLoS One.

Rajender Aparasu, Ph.D., FAPhA, professor and department chair, has been invited to serve on a national workgroup under the Centers for Disease Control and Prevention's National Center for Health Statistics.

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Greg D. Cuny, Ph.D., associate professor, has been appointed assistant chair in the Department of Pharmacological and Pharmaceutical Sciences.

Jagadesh Rao Earla, Pharm.D., MBA, Ph.D. candidate, received an ICPE All Access 2020 Scholarship from the International Society for Pharmacoepidemiology to present "Comparative Treatment Effectiveness of Oral Fingolimod and Injectable Disease Modifying Agents in Multiple Sclerosis" in a virtual podium session during the ICPE All Access 2020 meeting.

Samina Salim, Ph.D., associate professor, has been selected for the Fulbright Specialist Roster of the U.S. Department of State's Bureau of Educational and Cultural Affairs and World Learning.

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Elisabeth Sulaica, Pharm.D., BCCP, clinical assistant professor, has been appointed to the 2020-2021 Student Society of Health-System Pharmacists Faculty Advisory Panel of the American Society of Health-System Pharmacists.

### **College Salutes** Top 2019-20 Preceptors

UHCOP has recognized several preceptors and a site for excellence in experiential education during the 2019-20 academic year. This year's honorees are:

Health System Pharmacy of the Year — Memorial Hermann Memorial City;

Hospital Pharmacy Preceptor of the Year — Judy Motanya, Pharm.D., Memorial Hermann Memorial City;

Institutional Patient Care Preceptor of the Year — Linda Vu, Pharm.D., BCPS, Memorial Hermann The Woodlands;

Community Preceptor — Michelle Batarse, Pharm.D., CVS;

Ambulatory Care Preceptor of the Year — Esteban Gallardo, Pharm.D., CareAllies; and

Faculty Preceptor of the Year — Elisabeth Sulaica, Pharm.D., BCCP, UHCOP.

#### **Recent Publications**

Sleep deprivation, oxidative stress and inflammation. **Atrooz F, Salim S.** Adv Protein Chem Struct Biol. 2020;119:309-336. doi: 10.1016/bs.apcsb.2019.03.001. Epub 2019 Apr 24. PMID: 31997771

CRISPR-Cas9-induced IGF1 gene activation as a tool for enhancing muscle differentiation via multiple isoform expression. Roberston MJ, **Raghunathan S**, Potaman VN, Zhang F, Stewart MD, **McConnell BK**, Schwartz RJ. FASEB J. 2020 Jan;34(1):555-570. doi: 10.1096/fj.201901107RR. Epub 2019 Nov 25. PMID: 31914652

RNA-based therapeutics for colorectal cancer: Updates and future directions. **Liu J**, **Guo B**. Pharmacol Res. 2020;152:104550. doi:10.1016/j.phrs.2019.104550

Emerging Role of Angiotensin AT2 Receptor in Anti-Inflammation: An Update. **Patel SN**, Fatima N, Ali R, **Hussain T**. Curr Pharm Des. 2020;26(4):492-500. doi: 10.2174/1381612826666200115092015. PMID: 31939729

SNARE Complex-Associated Proteins and Alcohol. **Das J**. Alcohol Clin Exp Res. 2020 Jan;44(1):7-18. doi: 10.1111/acer.14238. Epub 2019 Dec 11. PMID: 31724225 Review.

Simvastatin improves lysosome function via enhancing lysosome biogenesis in endothelial cells. Zhang Y, **Wang YT**, **Koka S**, **Zhang Y**, **Hussain T**, **Li X**. Front Biosci (Landmark Ed). 2020 Jan 1;25:283-298. PMID: 31585890

Eosinopenia and Binary Toxin Increase Mortality in Hospitalized Patients With Clostridioides difficile Infection. Carlson TJ, Endres BT, Le Pham J, Gonzales-Luna AJ, Alnezary FS, Nebo K, Miranda J, Lancaster C, Bassères E, Begum K, Alam MJ, Reveles KR, Garey KW. Open Forum Infect Dis. 2020 Jan 4;7(1):ofz552. doi: 10.1093/ofid/ofz552. eCollection 2020 Jan. PMID: 31993458

Renal Dopamine Oxidation and Inflammation in High Salt Fed Rats. **Banday AA, Lokhandwala MF.** J Am Heart Assoc. 2020 Jan 7;9(1):e014977. doi: 10.1161/JAHA.119.014977. Epub 2019 Dec 27. PMID: 31880979

Differences between pharmacists' perception of counseling and practice in the era of prescription drug misuse. **Thornton JD, Anyanwu P, Tata V**, Al Rawwad T, Fleming ML. Pharm Pract (Granada). 2020 Jan-Mar;18(1):1682. doi: 10.18549/PharmPract.2020.1.1682. Epub 2020 Feb 24. PMID: 32206140

Systemic  $\beta$ -Adrenergic Receptor Activation Augments the ex vivo Expansion and Anti-Tumor Activity of V $\gamma$ 9V $\delta$ 2 T-Cells. Baker FL, Bigley AB, Agha NH, Pedlar CR, O'Connor DP, **Bond RA**, Bollard CM, Katsanis E, Simpson RJ. Front Immunol. 2020 Jan 24;10:3082. doi: 10.3389/fimmu.2019.03082. eCollection 2019. PMID: 32038628

Use of Atypical Antipsychotics in Long-Term Care Residents with Parkinson's Disease and Comorbid Depression. **Chekani F**, Holmes HM, **Johnson ML**, **Chen H**, **Sherer JT**, **Aparasu RR**. Drug Healthc Patient Saf. 2020 Jan 31;12:23-30. doi: 10.2147/DHPS.S226486. eCollection 2020. PMID: 32099480

Risk of Mortality Associated With Atypical Antipsychotic use: A National Cohort Study of Older Adults With Depression and Parkinson's Disease. **Chekani F**, Holmes HM, **Johnson ML**, **Chen H**, **Sherer JT**, **Aparasu RR**. Am J Geriatr Psychiatry. 2020 Feb 7:S1064-7481(20)30216-5. doi: 10.1016/j.jagp.2020.01.193. PMID: 32147383

PCR ribotypes of Clostridioides difficile across Texas from 2011 to 2018 including emergence of ribotype 255. **Gonzales-Luna AJ**, Carlson TJ, **Dotson KM**, **Poblete K**, Costa G, Miranda J, Lancaster C, Walk ST, Tupy S, Begum K, **Alam MJ**, **Garey KW**. Emerg Microbes Infect. 2020 Feb 10;9(1):341-347. doi: 10.1080/22221751.2020.1721335. eCollection 2020. PMID: 32037964

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Use of disease modifying agents in patients with multiple sclerosis: Analysis of ten years of national data. **Earla JR, Paranjpe R, Kachru N,** Hutton GJ, **Aparasu RR**. Res Social Adm Pharm. 2020 Mar 11:S1551-7411(19)31090-3. doi: 10.1016/j.sapharm.2020.02.016. PMID: 32171597

Vitamin D Suppresses Ovarian Cancer Growth and Invasion by Targeting Long Non-Coding RNA CCAT2. **Wang L**, Zhou S, **Guo B**. Int J Mol Sci. 2020;21(7):2334. Published 2020 Mar 27. doi:10.3390/ijms21072334

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Incidence of Chronic Opioid Use in Previously Opioid-Naïve Patients Receiving Opioids for Analgesia in the Intensive Care Unit. Adil MQ, **De La Cruz A, Thornton JD, Wanat MA**. Fed Pract. 2020 Apr;37(4):170-176. PMID: 32322148

A retrospective study of drug utilization and hospital readmissions among Medicare patients with hepatic encephalopathy. **Vadhariya A, Chen H**, Serna O, Zamil H, **Abughosh SM**. Medicine (Baltimore). 2020 Apr;99(16):e19603. doi: 10.1097/MD.0000000000019603. PMID: 32311928

Comparison of Effects of Spatial and Non-Spatial Memory Acquisition on the CaMKII Pathway During Hypothyroidism and Nicotine Treatment. **Alkadhi KA**, **Alzoubi KH**. Mol Neurobiol. 2020 Apr;57(4):1930-1937. doi: 10.1007/s12035-019-01865-6. Epub 2020 Jan 3. PMID: 31900862

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