



UH PharmD Students, Houston Program Residents and Partnering Institution Earn TSHP Honors

UHCOP Pharm.D. students took top honors in the Disease State Management Competition and two divisions of the Clinical Skills Competition at the Texas Society of Health-System Pharmacists 2018 Annual Seminar April 6-8 in The Woodlands.

The Pharm.D. students recognized in the TSHP Research & Education Foundation-sponsored events were:

- Disease State Management – **Erica Morales**, Winner, and **Sara Mirjamali**, Honorable Mention recipient; and
- Clinical Skills – **Amanda Gee** and **Katelynn Tran**, P1 Division Winners, **Ibrahim Chowdhury** and **Sean Badal**, P3 Division Winners, and **Lauren Goldberg** and **Lucas Merten**, P3 Division Honorable Mention recipients.

In addition, two Houston Program residents/master's students and one of the program's member institutions were honored at the meeting. The Houston Program's TSHP award recipients were:

- Leo F. and Ann Godley Residency Fellowship Award – **Devlin V.**



UH Pharm.D. student honorees included, front row, Sara Mirjamali, Lauren Goldberg, and Erica Morales, and, back row, Sean Badal, Ibrahim Chowdhury and Lucas Merten. Not pictured are Amanda Gee and Katelynn Tran.

Smith, Pharm.D., UHCOP M.S. candidate and University of Texas-MD Anderson Cancer Center PGY2 Health-System Pharmacy Administration resident;

- Research Poster Competition-Resident Category – Winner **Thomas Roduta**, Pharm.D., UHCOP M.S. candidate and Memorial Hermann Health System PGY2 Health-System Pharmacy Administration resident, for his project titled "Impact of Real-Time Prescription Benefit Information at Point of Discharge on a Provider-Sponsored Health Plan," which was coauthored by UHCOP Pharm.D. alumnus **Dominic Vu**, director of Pharmacy at Memorial Hermann Health Solutions, Houston Program alumnus **Rodney Cox**, R.Ph., M.S., director of Pharmacy at Memorial Hermann The Woodlands, and UHCOP faculty members **David A. Wallace**, Pharm.D., and **Susan Abughosh**, Ph.D.; and

- Residency Excellence Award – **Houston Methodist Hospital's** PGY1-PGY2 in Health-System Pharmacy Administration in collaboration with the UHCOP M.S. in Pharmacy Leadership & Administration degree program.

Hussain Secures \$1.6M NIH Grant to Study Anti-inflammatory, Reno-protective Role of AT₂ Receptor in Obese Kidney

Tahir Hussain, Ph.D., UHCOP professor of Pharmacology, has received a new five-year, \$1.6 million R01 grant from the National Institute of Diabetes and Digestive and Kidney Diseases to investigate the activity of the renal angiotensin 2 (AT₂) receptor as a potential novel target to combat local inflammation in the kidney, protecting against kidney injury and aiding in kidney repair following injury.

Results from his previous National Institutes of Health-supported research on pre-hypertensive obese rat and mice suggest that AT₂R agonist treatment reduces inflammatory cytokines and protect the kidney against both chronic and acute injury, particularly in obesity.

In the new phase of his research, Hussain hypothesizes that AT₂ receptor activation increases the activity of the IL-10 pathway, promotes a cross-talk between kidney epithelial cells and macrophages, and shifts the macrophages from pro- to anti-inflammatory activity.

State-of-the-art techniques will be employed to determine biochemical, histological and molecular outcomes of kidney injury and



function. The new phase also will include experiments to study the role of estrogen in AT₂R-mediated reno-protection in females.

AMCP Chapter Nets 2nd Place in National Chapter Challenge, Invitation to Leadership Academy Panel

The UHCOP Chapter of the Academy of Managed Care Pharmacy's advocacy work led it to second place in the national Chapter Challenge at the AMCP Managed Care & Specialty Pharmacy 2018 Annual Meeting April 23-26 in Boston.

The Chapter Challenge is designed to allow students to engage with AMCP on a national level with the organization's policy issues as well as become educated on managed-care policies and barriers that may affect them in their future practice.

The UHCOP chapter also was one of only five invited to participate in the national organization's Chapter Leadership Academy (CLA), with



Flanked by fellow UHCOP AMCP Chapter officers Angelica Asadi and Grace Pham, Chapter President Kim Dinh displays the chapter's invitation to serve as one of only five panelists on the AMCP Chapter Leadership Academy at the AMCP Managed Care & Specialty Pharmacy Annual Meeting April 23-26 in Boston.

the college's Chapter President **Kim Dinh** serving on the academy's "This is Advocacy" panel.

In addition, chapter Immediate Past President **Angelica Asadi** presented a research poster for her project, "A motivational interviewing elective for pharmacy students: a student perspective."

Study coauthors were UHCOP Pharmaceutical Health Outcomes and Policy (PHOP) Ph.D. student **Aisha Vadhariya**, PHOP faculty members and study sponsors **Marc Fleming**, Ph.D., MPH, R.Ph., and

Susan Abughosh, Ph.D., and UHCOP alumnus **Omar Serna**, Pharm.D., BCACP, clinical operations manager for CareAllies.



Latest 'Schweitzer Fellow for Life' Paves Way for UHCOP's Largest Class

UHCOP Pharm.D. student **Stephanie Crowley** attained "Schweitzer Fellow for Life" from the Albert Schweitzer Fellowship Houston-Galveston following the completion of her yearlong "beading class" project that provided skill development and socialization to residents of a Houston nonprofit focused on the formerly homeless or those at risk of being homeless. The third UHCOP student to enter and complete the program, Crowley is being succeeded by the college's largest class of participants in 2018-19: **Annette Augustine**, **Graziela Putnam** and **Rhea Soltau**.

UHCOP Pharmacology Ph.D. candidate **Suchi Raghunathan** received a American Society of Pharmacology and Experimental Therapeutics (ASPET) Travel Award to present a poster at the ASPET Annual Meeting at Experimental Biology 2018 April 21-25 in San Diego, Calif. Her project, "Reprogramming Human Cardiac Progenitor Cells into Pacemaker Cells for Heart Repair," was coauthored by UH Department of Biology and Biochemistry's **Dinakar Iyer**, Ph.D., and **Robert J. Schwartz**, Ph.D.; The Texas Heart Institute's **Vladimir Potaman**, MIPT; and her faculty advisor, UHCOP's **Bradley K. McConnell**, Ph.D., FAHA, FCVS.

UH's Kappa Psi Chapter, Leader Claim Major Victories at Southwest Province Meeting

The UHCOP Delta Delta Chapter of the Kappa Psi Pharmaceutical Fraternity landed its third consecutive Chapter of the Year title during the Southwest Province Spring Meeting March 9-11 in Norman, Okla.

The chapter's prior wins came at the Spring meetings in February 2017 in San Antonio and in March 2016 in Houston.

Chapter Regent (president) and outgoing Province Secretary **Rohan Dwivedi** was honored not only with the province's inaugural Regent of the Year Award, but also election to the office of 2018-19 Province Satrap. In addition, Delta Delta member **Jessie Ho** was elected Province Historian at the meeting.



Southwest Province officer Anthony Bray of HEB presents the Province Chapter of the Year Award to Delta Delta chapter officers Sabrina Ali, Rohan Dwivedi, and Samantha Sangabi.

Abughosh's Project to Boost Medication Adherence with PharmD Student Interventions Draws \$459K NIH Grant

A UHCOP medication adherence project aimed at improving health outcomes of patients with diabetes and hypertension comorbidities through behavioral changes resulting motivational interviewing counseling by Pharm.D. students has been awarded a \$459,000 grant by the National Heart, Lung and Blood Institute.

The project is being led by Pharmaceutical Health Outcomes and Policy Associate Professor **Susan Abughosh**, Ph.D., whose prior research in medication adherence studies with MI-trained Pharm.D. students was published in the January 2016 and May 2017 issues of the *Journal of Managed Care & Speciality Pharmacy*. The current project will include a retrospective analysis of 12 month refill data to determine patient adherence pattern and a prospective study among non-adherent patients to evaluate the effectiveness of the customized interventions provided by PharmD students trained in MI techniques.



UHCOP, UTHealth Event on Medication Safety Draws Multidisciplinary Audience

Drawing an audience of nearly 200 researchers, students and practitioners across multiple disciplines, the 2018 Houston Medication Safety Symposium on April 13 explored the roots and current status of prescription burden in older adults and the U.S. opioid crisis as well as needed changes in practices and policies to reverse the trends.

The symposium was co-hosted by UHCOP's Department of Pharmaceutical Health Outcomes and Policy (PHOP) and the McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth), and co-sponsored by the UTHealth Consortium on Aging and the Phyllis Gough Huffington Endowed Lectureship.

The featured speakers were **Mellar Davis**, MD, FCCP, FAAHPM, of Geisinger Medical Center System; **Mary Lynn McPherson**, PharmD, MA, MDE, BCPS, CPE, of the University of Maryland, School of Pharmacy; **Jerry Gurwitz**, MD, of the University of Massachusetts Medical School; and **Paula Rochon**, MD, MPH, FRCPC, of Women's College Hospital and the University of Toronto. The symposium also featured nearly 30 research poster and podium presentations that will be published in an upcoming issue of *Research in Social and Administrative Pharmacy* (Elsevier).

The award recipients and their projects were:

- 1st Place Podium – **Victor Liaw** of The University of Texas at Austin College of Natural Sciences, "Change in Opioid Prescribing Patterns Among Disabled Adults Following Hydrocodone Rescheduling";
- 2nd Place Podium – **Manvi Sharma** of UHCOP-PHOP, "Concomitant Use of Tyrosine Kinase Inhibitors & Proton Pump Inhibitors in Older Adults with Cancer";
- 1st Place Poster – **Chandni Patel** of McGovern Medical School at UTHealth, "The Effects of Missed Doses of Antibiotics on Hospitalized Patient Outcomes"; and
- 2nd Place Poster – **Monica Cheng** of McGovern Medical School at UTHealth, "Medication Adherence and Personal Determinants of Health among Self-Neglecting Older Adults."



UH Group Teaching Award Honors Team of 14 Instructors in Pharmacology Graduate Course

A team of 14 faculty researchers from UH College of Pharmacy's Department of Pharmacological & Pharmaceutical Sciences and five external institutions was recognized April 26 with the Group Teaching Award for the Cardiovascular and Renal Pharmacology graduate course by the UH Office of the Vice President for Academic Affairs & Provost.

The course format is based on a different instructor each week presenting a key topic and his or her specific field of research. Student assignments include reading original research papers assigned by the instructor, engaging in tutorial style class discussions and hands-on activities, submitting reports on the presented material, and delivering an end-of-semester critique of a journal article tied to a course topic.

UHCOP's **Bradley K. McConnell**, Ph.D., FAHA, FCVS, has coordinated and taught a section of the course since 2013. The team's other members were: **Anees Banday**, Ph.D., **Krishna Boini**, Ph.D., **Richard A. Bond**, Ph.D., FBPhS, **Tahir Hussain**, Ph.D., **Sai S. Koka**, Ph.D., R.Ph., and **Ke-He Ruan**, M.D., Ph.D., all of UHCOP; **Peter Doris**, Ph.D., Institute of Molecular Medicine, UTHealth; **Terry Kenakin**, Ph.D., School of Medicine, University of North Carolina, Chapel Hill; **Na Li**, Ph.D., and **George Rodney**, Ph.D., Department of Molecular Physiology and Biophysics, Baylor College of Medicine; **Adebayo Oyekan**, DVM, Ph.D., FAHA, College of Pharmacy and Health Sciences, Texas Southern University; and **Regis Vollmer**, Ph.D., University of Pittsburgh College of Pharmacy.

Recent Publications

- A mini-library system to investigate non-essential residues of lipid-phosphatidylserine (PS) binding peptide-peptoid hybrid PPS1. **Shukla SP, Udugamasooriya DG.** *Medchemcomm.* 2017 Dec 1;8(12):2208-2215. doi: 10.1039/C7MD00372B. Epub 2017 Oct 24
- Activation loop targeting strategy for design of receptor-interacting protein kinase 2 (RIPK2) inhibitors. **Suebsuwong C,** Pinkas DM, Ray SS, Bufton JC, Dai B, Bullock AN, Degtrev A, **Cuny GD.** *Bioorg Med Chem Lett.* 2018 Jan 31. pii: S0960-894X(18)30054-4. doi: 10.1016/j.bmcl.2018.01.044. [Epub ahead of print] PMID: 29409752
- Nanoparticle orientation to control RNA loading and ligand display on extracellular vesicles for cancer regression. Pi F, Binzel DW, Lee TJ, Li Z, **Sun M,** Rychahou P, Li H, Haque F, Wang S, Croce CM, **Guo B,** Evers BM, Guo P. *Nat Nanotechnol.* 2018 Jan;13(1):82-89. doi: 10.1038/s41565-017-0012-z. Epub 2017 Dec 11. PMID: 29230043
- Older Adults and Heart Disease. Alexander KP, Doherty CL, **Birtcher KK,** Krishnaswami A, Mendys P, Hart LL, Forman DE, Maurer M. Published Jan 2018. www.cardiosmart.org/OlderAdults
- Exercise decreases BACE and APP levels in the hippocampus of a rat model of Alzheimer's disease. **Alkadhi KA, Dao AT.** *Mol Cell Neurosci.* 2018 Jan;86:25-29. doi: 10.1016/j.mcn.2017.11.008. Epub 2017 Nov 9. PMID: 29128320
- Case-based studies in teaching medicinal chemistry in PharmD curriculum: Perspectives of students, faculty, and pharmacists from academia. **Das J, Fernandez J, Shah D, Williams L, Zagaar M.** *Curr Pharm Teach Learn.* 2018 Jan - Feb;10(1):85-89. doi: 10.1016/j.cptl.2017.09.004. Epub 2017 Oct 29. PMID: 29248080
- Phosphaplatin Anti-tumor Effect Enhanced by Liposomes Partly via an Up-regulation of PEDF in Breast Cancer. Belkacemi L, Atkins JL, Yang LU, **Gadgil P,** Sater AK, **Chow DS,** Bose RN, Zhang SX. *Anticancer Res.* 2018 Feb;38(2):623-646. PMID: 29374685
- Plasmonic nanoparticle-based expansion microscopy with surface-enhanced Raman and dark-field spectroscopic imaging. Artur CG, **Womack T,** Zhao F, **Eriksen JL,** Mayerich D, **Shih WC.** *Biomed Opt Express.* 2018 Jan 10;9(2):603-615. doi: 10.1364/BOE.9.000603. eCollection 2018 Feb 1. PMID: 29552397
- Interventions to improve endocrine therapy adherence in breast cancer survivors: what is the evidence? Ekinci E, Nathoo S, Korattiyil T, **Vadhariya A,** Zaghoul HA, Niravath PA, **Abughosh SM, Trivedi MV.** *J Cancer Surviv.* 2018 Feb 2. doi: 10.1007/s11764-017-0674-4. [Epub ahead of print] Review. PMID: 29396760
- Perspective on Circulating Tumor Cell Clusters: Why It Takes a Village to Metastasize. Mario Giuliano, **Anum Shaikh,** Hin Ching Lo, Grazia Arpino, Sabino De Placido, Xiang H. Zhang, Massimo Cristofanilli, Rachel Schiff and **Meghana V. Trivedi.** *Cancer Res,* Feb 2 2018. DOI:10.1158/0008-5472.CAN-17-2748
- Interventions to improve endocrine therapy adherence in breast cancer survivors: what is the evidence? Ekinci E, **Nathoo S, Korattiyil T, Vadhariya A,** Zaghoul HA, Niravath PA, **Abughosh SM, Trivedi MV.** *J Cancer Surviv.* 2018 Feb 2. doi: 10.1007/s11764-017-0674-4. [Epub ahead of print] Review. PMID: 29396760
- Effect of warning placement on the information processing of college students reading an OTC drug facts panel. **Bhansali AH, Sangani DS, Mhatre SK, Sansgiry SS.** *J Am Coll Health.* 2018 Feb 6:1-9. doi: 10.1080/07448481.2018.1431891. [Epub ahead of print] PMID: 29405851
- Transcriptional profiles of pulmonary innate immune responses to isogenic antibiotic-susceptible and multidrug-resistant *Pseudomonas aeruginosa*. **Tam VH, Pérez C, Ledesma KR, Lewis RE.** *Microbiol Immunol.* 2018 Feb 8. doi: 10.1111/1348-0421.12581. [Epub ahead of print] PMID: 29418013
- Detecting Infections Rapidly and Easily for Candidemia Trial, Part 2 (DIRECT2): A Prospective, Multicenter Study of the T2Candida Panel. Clancy CJ, Pappas PG, Vazquez J, Judson MA, Kontoyiannis DP, Thompson GR 3rd, **Garey KW,** Reboli A, Greenberg RN, Apewokin S, Lyon GM 3rd, Ostrosky-Zeichner L, Wu AHB, Tobin E, Nguyen MH, Caliendo AM. *Clin Infect Dis.* 2018 Feb 9. doi: 10.1093/cid/cix1095. [Epub ahead of print] PMID: 29438475
- Oxidative stress impairs cGMP-dependent protein kinase activation and vasodilator-stimulated phosphoprotein serine-phosphorylation. **Banday AA, Lokhandwala MF.** *Clin Exp Hypertens.* 2018 Feb 9:1-9. doi: 10.1080/10641963.2018.1433197. [Epub ahead of print] PMID: 29424564
- Role of c-Jun-N-Terminal Kinase in Pregnane X Receptor-Mediated Induction of Human Cytochrome P4503A4 In Vitro. Taneja G, Chu C, Maturu P, **Moorthy B, Ghose R.** *Drug Metab Dispos.* 2018 Apr;46(4):397-404. doi: 10.1124/dmd.117.079160. Epub 2018 Feb 12. PMID: 29440179
- FRAX tool underestimates the risk of osteoporotic fractures in mental disorders. **Aparasu RR, Rege S.** *Evid Based Ment Health.* 2018 Feb 20. pii: ebmental-2017-102815. doi: 10.1136/eb-2017-102815. [Epub ahead of print] PMID: 29463572
- Rezafungin (CD101), a next generation echinocandin. A systematic literature review and assessment of possible place in therapy. **Sofjan AK, Mitchell A, Shah DN, Nguyen T, Sim M, Trojcek A, Beyda ND, Garey KW.** *J Glob Antimicrob Resist.* 2018 Feb 24. pii: S2213-7165(18)30041-9. doi: 10.1016/j.jgar.2018.02.013. [Epub ahead of print] PMID: 29486356
- Role of AT2R (Angiotensin Type 2 Receptor) in Maintaining Sodium-Potassium Balance. **Patel S, Hussain T.** *Hypertension.* 2018 Apr;71(4):563-565. doi: 10.1161/HYPERTENSIONAHA.117.10552. Epub 2018 Feb 26. PMID: 29483226
- Simultaneous inhibition of hedgehog signaling and tumor proliferation remodels stroma and enhances pancreatic cancer therapy. Zhao J, Wang H, **Hsiao CH, Chow DS,** Koay EJ, Kang Y, Wen X, Huang Q, Ma Y, Bankson JA, Ullrich SE, Overwijk W, Maitra A, Piwnicka-Worms D, Fleming JB, Li C. *Biomaterials.* 2018 Mar;159:215-228. doi: 10.1016/j.biomaterials.2018.01.014. Epub 2018 Jan 9. PMID: 29331808
- HIV-related sexual decisions made by African-American adolescents living in different family structures: study from an ecodevelopmental perspective. **Li YH,** Cuccaro P, **Chen H, Abughosh S,** Mehta PD, **Essien EJ.** *HIV AIDS (Auckl).* 2018 Mar 9;10:19-31. doi: 10.2147/HIV.S144594. eCollection 2018. PMID: 29576732
- Accelerate PhenoTest™ BC Kit Versus Conventional Methods for Identification and Antimicrobial Susceptibility Testing of Gram-Positive Bloodstream Isolates: Potential Implications for Antimicrobial Stewardship. **Sofjan AK, Casey BO, Xu BA, Amadio J,** Restrepo A, **Alam MJ, Garey KW.** *Ann Pharmacother.* 2018 Mar 1:1060028018765486. doi: 10.1177/1060028018765486. [Epub ahead of print] PMID: 29557208
- In vitro activity of tedizolid and comparator agents against clinical Gram-positive isolates recovered from patients with cancer. **IRolston KV,** Reitzel R, Vargas-Cruz N, Shelburne SA, Raad II, **Prince RA.** *Diagn Microbiol Infect Dis.* 2018 Mar 16. pii: S0732-8893(18)30099-3. doi:10.1016/j.diagmicrobio.2018.03.009. [Epub ahead of print] PMID: 29661529