## UNIVERSITY of HOUSTON COLLEGE OF PHARMACY

#### Report to the Texas Pharmacy Congress — Feb. 20-21, 2018



#### Research Faculty Begin Move, Core Lab Build-out Underway

Between December and January, nearly all of UH College of Pharmacy's clinical/translational and basic sciences research faculty, students and staff completed their move-in to their new state-of-the-art laboratory spaces in the college's new home in the nine-story, 300,000-square-foot Health Building 2. The remaining faculty are expected to begin moving in March, which also will mark the start of delivery and installation of major equipment for the initial core facilities, such as the college's first in-house nuclear magnetic resonance instrument.









#### Students Provide 200 Screenings, Education in 1st RGV Fair with DHR

As UH College of Pharmacy moves forward with faculty and preceptor recruitment and formalizing experiential site agreements, a crew of 19 Pharm.D. students – mostly members of the college's Mexican-American Pharmacy Student Association – participated in Doctor's Hospital at Renaissance's 12th Annual DHR Health Community Health Fair Jan. 20 in Edinburg. The event marked the first patient-centered activity between UHCOP and DHR since the organizations partnered to create the Rio Grande Valley Pharm.D. Satellite Program and welcomed former DHR pharmacy manager Ronnie Ozuna, Pharm.D., BCPS, as the program's inaugural dean last year.





# NAPLEX 99.66%

108 first-time test-takers



All data combined for Trimesters 1-3, 2017

The University of Houston is an EEO/AA institution.

## Patient Counseling Competition

More than 60 students participated in the UHCOP APhA-ASP Chapter's 2017-18 Patient Counseling Competition, sponsored by Kroger. P3 student Sara Mirjamali won this year's local competition and will represent the college in the national competition in March. At right, Mirjamali (front row center) is flanked by top 10 finalists and Kroger representative Debbie Veselka, R.Ph., and Chapter coadvisor Bernadette Asias-Dinh, Pharm.D., BCPS, BCACP, CDE.





#### Meet & Greet

The UHCOP Chapter of NCPA hosted its 8th Annual Meet & Greet Feb. 13 for students and owners/pharmacists from seven independent pharmacists across the Greater Houston area. Anjanette Wyatt, Pharm.D., of Clinical Care Pharmacy delivered the keynote address, and Justin Hudman (pictured at right) of PharmPAC provided a legislative update.

### **Residency Mentoring Social**

Nearly 150 students, residents and residency program directors attended the 13th Annual Residency Mentoring Social Jan. 29. Co-hosted by the UHCOP and TSU SSHP Chapters, the program included a keynote by Anjanette Wyatt, Pharm.D., of Clinical Care Pharmacy, and remarks by Gulf Coast SHP President-elect Joseph Rogers, Pharm.D., M.S., of Memorial Hermann Health System; UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph.; and TSU College of Pharmacy & Health Sciences Interim Dean Shirlette Glover Milton. Ph.D., R.Ph.



#### tinyurl.com/safe-med-houston

#### Friday, April 13, 2018

## Houston Medication Safety Symposium

A New Look at Reducing Prescription Burden & Misuse

Free Online Registration: http://tinyurl.com/hmss18-reg Free Continuing Education Credits (details pending) Podium & Poster Awards: http://tinyurl.com/hmss18-abs Plenary Session Speakers: Mellar Davis, MD, FCCP, FAAHPM • Jerry Gurwitz, MD Lynn McPherson, PharmD, MA, MDE, BCPS, CPE • Paula Rochon, MD, MPH, FRCPC

Hosted by UT Health McGovern Medical School & University of Houston College of Pharmacy Sponsored by UTHealth Consortium on Aging & Phyllis Gough Huffington Endowed Lectureship

#### Research & Faculty News

Nicholas D. Beyda, Pharm.D., BCPS, assistant professor, served as first author or contributor on three chapters in the 7th edition of *Kucers' The Use of Antibiotics: A Clinical Review of Antibiacterial, Antifungal, Antiparasitic, and Antiviral Drugs* (CRC Press, October 2017).

• • • • • • • • • •

**Richard A. Bond**, Ph.D., professor, was named Honorary Fellow of the British Pharmacological Society in December 2017.

• • • • • • • • • •

Kevin W. Garey, Pharm.D., M.S., FASHP, professor, has been awarded a \$203,785 grant from the Texas Medical Center's Health Policy Institute for his project, "Surveillance of Multidrug-Resistant Emerging Healthcare Pathogens." Garey also has been awarded subcontracts on two National Institutes of Health-funded projects: a one-year, \$112,875 award for "Relationships Between Metronidazole Resistance, Pharmacodynamics and Treatment Outcomes in *Clostridium difficile* Infection" via Texas A&M University Health Science Center, and a twoyear, \$247,200 award for "Ultrasensitive C.difficile Toxin Measurement for Diagnosis and Outcome Prediction" via Beth Israel Deaconess Medical Center. Garey also has received a \$98,246 grant from Summit Pharmaceuticals for "Effect of ridinilazole on *Clostridium difficile* spores."

• • • • • • • • • •

Santhi Masilamani, Pharm.D., MBA, CDE, clinical assistant professor, served as an expert reviewer for *Kaplan's NAPLEX Prep 2018* (Kaplan Medical).

• • • • • • • • • •

. . . . . . . . . .

**Amelia K. Sofjan**, Pharm.D., BCPS, clinical assistant professor, was among the graduates of the 2017 American College of Clinical Pharmacy's Teaching and Learning Academy.

**Bradley K. McConnell**, Ph.D., FAHA, FAPS, associate professor, has been awarded a three-year, \$475,000 grant from the Robert J. Kleberg, Jr. and Helen C. Kleberg Foundation for his project, "Gravin Signalosome is a Novel Therapeutic Drug Target for the Treatment of Heart Failure.

**Samina Salim**, Ph.D., associate professor, has been appointed to a three-year editorial board term on the journal *Physiology & Behavior* (Elsevier Press).

. . . . . . . . . .

**Vincent H. Tam**, Pharm.D., BCPS (AQ-ID), professor, has been awarded a \$546,707 grant from ScPharmaceuticals for his project, "Development and Validation of Tissue Necrosis Animal Models to Test Novel Subcutaneous Formulations."

• • • • • • • • • •

The research team of UHCOP Professors **Vincent H. Tam**, Pharm.D., BCPS (AQ-ID), and **Diana S-L. Chow**, Ph.D., FNAI, and their former student, alumna **Jie He**, Ph.D., now a post-doctoral fellow at Baylor College of Medicine, have been awarded a U.S. patent (9820940) for their invention, "Liposomal formulations of polymyxin B."

••••••

**Divya A. Varkey**, Pharm.D., M.S., clinical associate professor, has been honored with the Texas Society of Health System Pharmacists' 2017 Special Recognition Award for Educational Service.

. . . . . . . . . .

**Matthew A. Wanat**, Pharm.D., BCPS, BCCCP, clinical assistant professor, earned a Presidential Citation from the Society of Critical Care Medicine in December 2017 and will be inducted as a SCCM Fellow at the 47th Critical Care Congress Feb. 25-28 in San Antonio.

#### 23 Students Present Research Posters at 2017 ASHP Midyear Meeting

Nearly two dozen UH College of Pharmacy Pharm.D. students and candidates will present their research posters at the American Society of Health-System Pharmacists' 2017 Midyear Clinical Meeting & Exhibition Dec. 3-7 in Orlando, Fla.

The presenting students and their projects were:

**Sean Badal**, "Role of presynaptic active zone proteins, munc13-1 and munc13-2, in alcoholism, and its potential clinical applications";

**Alyssa Marie Chionglo**, "The evaluation and improvement of the medication transfer process in a community inpatient setting";

**Ibrahim Chowdhury**, "Evaluating the appropriate use of ceftolozane/tazobactam at a large health-system";

**Rodrigo DeLaTorre**, "Comparison of the use of prothrombin complex concentrates versus fresh frozen plasma for reversal of bleeding in liver dysfunction patients undergoing cardiac surgery";

**Diane Dreucean**, "Evaluation of automated dispensing cabinet optimization in a community hospital emergency department";

**Devon El-Dana**, "Evaluating patient perceptions and the clinical impact of a diabetes self-management education and support (DSMES) program within a Medicare Advantage plan (MAP)";

**Uyen Huynh**, "Impact of a pharmacistdriven management protocol on acidsuppression therapy and its inappropriate use in intensive care unit patients";

**Grace Hwang**, "Pharmacists' intervention in sotalol management in a tertiary academic institution";

**Chidi Iroegbu**, "Medication Use Evaluation of Dalbavancin at a Comprehensive Cancer Center";

**Shutian Ju**, "Evaluation of blood pressure management in acute ischemic stroke patients prior to and post the implementation of a pharmacist-assisted blood pressure management guideline";

**Rebecca Kessinger**, "Evaluation of complications and readmission rates with rivaroxaban compared with warfarin";

**Amy Kiley**, "Institutional medication use evaluation of vancomycin at Memorial Hermann Southwest Hospital";

**Jaekyu Lee**, "Assessment of insulin drip protocol in Neuroscience Intensive care unit (NSICU)";

Ashley Long, "Evaluation of

dexmedetomidine use in adult ICU patients"; Felicia Merchant, "Pneumococcal

Vaccination Rates in the Diabetic Population: A

Cross Sectional Study";

**Teri Nguyen**, "Evaluation of meropenem prescribing patterns in the pediatric intensive care unit";

**Lena Rakouki**, "Evaluation of anti-platelet agents and bleeding in the post percutaneous coronary intervention (PCI) population: A case control study";

**Bolanle Soyombo**, "Evaluation of events and readmission rates with apixaban compared with warfarin";

**Sarah Theriault**, "Do corticosteroids protect against development of Clostridium difficile infection?";

**Thao Tran**, "Comparison of baseline characteristics in patients with non-valvular atrial fibrillation on warfarin versus apixaban: a retrospective cohort analysis";

**Melissa Wilcox**, "Effect of Clostridium difficile infection on inpatient mortality in hospitalized patients exposed to broadspectrum antibiotics";

**Ryan Winslow**, "Assessment of pharmacy students professional and inter-professional development in direct patient care settings at a large, tertiary pediatric hospital"; and

Andrei Zidaru, "Evaluation of bleeding in the post percutaneous coronary intervention (PCI) population receiving heparin: A case control study."

#### **Recent Publications**

AAngiotensin II Type 2 Receptor and Receptor Mas Are Colocalized and Functionally Interdependent in Obese Zucker Rat Kidney. **Patel SN, Ali Q,** Samuel P, Steckelings UM, **Hussain T**. Hypertension. 2017 Oct;70(4):831-838. doi: 10.1161/HYPERTENSIONAHA.117.09679. PMID: 28827476

An UPLC-MS/MS method for quantifying tetrandrine and its metabolite berbamine in human blood: Application to a human pharmacokinetic study. Yang G, Zhang C, Hu P, Zhu M, **Hu M**, Gao S. J Chromatogr B Analyt Technol Biomed Life Sci. 2017 Oct 26. pii: S1570-0232(17)31255-2. doi: 10.1016/j.jchromb.2017.10.048. [Epub ahead of print] PMID: 29100757

PI3K/mTOR Inhibitors in the Treatment of Luminal Breast Cancer. Why, When and to Whom? Schettini F, Buono G, **Trivedi MV**, De Placido S, Arpino G, Giuliano M. Breast Care (Basel). 2017 Oct;12(5):290-294. doi: 10.1159/000481657. Epub 2017 Oct 19. Review. PMID: 29234247

Ceftolozane-tazobactam activity against meropenem non-susceptible Pseudomonas aeruginosa bloodstream infection isolates. **Skoglund E**, **Ledesma KR**, Lasco TM, **Tam VH**. J Glob Antimicrob Resist. 2017 Oct 31. pii: S2213-7165(17)30203-5. doi: 10.1016/j.jgar.2017.10.016. [Epub ahead of print] PMID: 29101084

Trimethylamine-N-Oxide Instigates NLRP3 Inflammasome Activation and Endothelial Dysfunction. **Boini KM**, **Hussain T**, Li PL, **Koka S**. Cell Physiol Biochem. 2017;44(1):152-162. doi: 10.1159/000484623. Epub 2017 Nov 6. PMID: 29130962

Reducing Cardiovascular Risk in a Patient with Peripheral Artery Disease and Diabetes. **Kiley A**, **Birtcher KK**. http://www.acc.org. Nov. 9, 2017. http://www.acc.org/education-and-meetings/patient-case-quizzes/ reducing-cv-risk-in-a-patient-with-pad-and-diabetes.

Prevalence of extended-spectrum beta-lactamase and carbapenemaseproducing bloodstream isolates of Klebsiella pneumoniae in a tertiary care hospital. **Abodakpi H, Chang KT**, Sánchez Díaz AM, Cantón R, Lasco TM, **Chan K, Sofjan AK, Tam VH**. J Chemother. 2017 Nov 10:1-5. doi: 10.1080/1120009X.2017.1399233. [Epub ahead of print] PMID: 29125052

Pharmacological Rescue of Hippocampal Fear Learning Deficits in Fragile X Syndrome. Martinez LA, Tejada-Simon MV. Mol Neurobiol. 2017 Nov 11. doi: 10.1007/s12035-017-0819-5. [Epub ahead of print] PMID: 29128904

Simultaneous determination of tilianin and its metabolites in mice using ultra-high-performance liquid chromatography with tandem mass spectrometry and its application to a pharmacokinetic study. Wang L, Chen Q, Zhu L, Zeng X, Li Q, **Hu M**, Wang X, Liu Z. Biomed Chromatogr. 2017 Nov 16. doi: 10.1002/bmc.4139. [Epub ahead of print] PMID: 29144552

Hypoxia inducible factor-1α mediates the profibrotic effect of albumin in renal tubular cells. Hu J, Wang W, Zhang F, Li PL, **Boini KM**, Yi F, Li N. Sci Rep. 2017 Nov 20;7(1):15878. doi: 10.1038/s41598-017-15972-8. PMID: 29158549

Antimicrobial Stewardship Opportunities in Critically Ill Patients with Gram-Negative Lower Respiratory Tract Infections: A Multicenter Cross-Sectional Analysis. Claeys KC, **Zasowski EJ**, Trinh TD, Lagnf AM, Davis SL, Rybak MJ. Infect Dis Ther. 2017 Nov 21. doi: 10.1007/s40121-017-0179-5. [Epub ahead of print] PMID: 29164489

Dihydroartemisinin selectively inhibits PDGFRα-positive ovarian cancer growth and metastasis through inducing degradation of PDGFRα protein. Li X, Ba Q, Liu Y, Yue Q, Chen P, Li J, Zhang H, Ying H, Ding Q, Song H, Liu H, **Zhang R**, Wang H. Cell Discov. 2017 Nov 21;3:17042. doi: 10.1038/cell-disc.2017.42. eCollection 2017. PMID: 29387451

Bacteremia in Patients With Liver Cirrhosis: Prevalence and Predictors of Multidrug Resistant Organisms. Addo Smith JN, Yau R, Russo HP, Putney K, Restrepo A, **Garey KW**, **Sofjan AK**. J Clin Gastroenterol. 2017 Nov 23. doi: 10.1097/MCG.00000000000064. [Epub ahead of print] PMID: 29176351

Optimization of a series of heterocycles as survival motor neuron gene transcription enhancers. Choi S, Calder AN, Miller EH, Anderson KP, Fiejtek DK, Rietz A, Li H, Cherry JJ, Quist KM, Xing X, Glicksman MA, **Cuny GD**,

Lorson CL, Androphy EA, Hodgetts KJ. Bioorg Med Chem Lett. 2017 Dec 1;27(23):5144-5148. doi: 10.1016/j.bmcl.2017.10.066. Epub 2017 Oct 26. PMID: 29103974

Population Pharmacokinetics of Polymyxin B. **Manchandani P**, Thamlikitkul V, Dubrovskaya Y, **Babic JT**, Lye DC, Lee LS, **Tam VH**. Clin Pharmacol Ther. 2017 Dec 14. doi: 10.1002/cpt.981. [Epub ahead of print] PMID: 29238962

Targeting the NFAT1-MDM2-MDMX Network Inhibits the Proliferation and Invasion of Prostate Cancer Cells, Independent of p53 and Androgen. Qin JJ, Li X, Wang W, Zi X, Zhang R. Front Pharmacol. 2017 Dec 14;8:917. doi: 10.3389/fphar.2017.00917. eCollection 2017. PMID: 29311926

Brain- and brain tumor-penetrating disulfiram nanoparticles: Sequence of cytotoxic events and efficacy in human glioma cell lines and intracranial xenografts. Madala HR, Punganuru SR, Ali-Osman F, **Zhang R**, Srivenugopal KS. Oncotarget. 2017 Dec 15;9(3):3459-3482. doi: 10.18632/oncotarget.23320. eCollection 2018 Jan 9. PMID: 29423059

Investigating inpatient medication administration using the theory of planned behavior. **Rogers JW**, **Fleming M**, Tipton J, Ward A, **Garey KW**, **Pitman EP**. Am J Health Syst Pharm. 2017 Dec 15;74(24):2065-2070. doi: 10.2146/ajhp160502. PMID: 29222364

Kidney Appreciates Stable Blood Pressure. **Patel SN**, Narayan P, Goldberg ID, Naaz F, **Hussain T**, **Ali Q**. Am J Hypertens. 2017 Dec 20. doi: 10.1093/ ajh/hpx212. [Epub ahead of print] PMID: 29272328

Overtreatment of Asymptomatic Candiduria among Hospitalized Patients: a Multi-institutional Study. **Jacobs DM**, Dilworth TJ, **Beyda ND**, Casapao AM, **Bowers DR**. Antimicrob Agents Chemother. 2017 Dec 21;62(1). pii: e01464-17. doi: 10.1128/AAC.01464-17. Print 2018 Jan. PMID: 29109159

Critical Role of Trp-588 of Presynaptic Munc13-1 for Ligand Binding and Membrane Translocation. **Das J**, Kedei N, Kelsey JS, You Y, **Pany S**, Mitchell GA, Lewin NE, Blumberg PM. 2018 Feb 6;57(5):732-741. doi: 10.1021/acs. biochem.7b00764. Epub 2018 Jan 5. PMID: 29244485

Structural determinants of phorbol ester binding activity of the C1a and C1b domains of protein kinase C theta. Czikora A, **Pany S**, You Y, Saini AS, Lewin NE, Mitchell GA, Abramovitz A, Kedei N, Blumberg PM, **Das J**. Biochim Biophys Acta. 2018 Jan 6. pii: S0005-2736(18)30007-5. doi: 10.1016/j. bbamem.2018.01.007. [Epub ahead of print] PMID: 29317197

Additional LDL-C Reduction in a Patient With High-Intensity Statin Therapy. **Zayed B, Birtcher KK**. http://www.acc.org.Jan. 9, 2018. http:// www.acc.org/education-and-meetings/patient-case-quizzes/additional-ldlc-reduction-in-a-patient-taking-high-intensity-statin-therapy.

Inhibiting  $\beta$ -Catenin by  $\beta$ -Carboline-Type MDM2 Inhibitor for Pancreatic Cancer Therapy. **Qin JJ, Wang W, Li X**, Deokar H, Buolamwini JK, **Zhang R.** Front Pharmacol. 2018 Jan 17;9:5. doi: 10.3389/fphar.2018.00005. eCollection 2018. PMID: 29387014

Dynamic recruitment of ubiquitin to mutant huntingtin inclusion bodies. Juenemann K, Jansen AHP, van Riel L, Merkx R, Mulder MPC, An H, **Statsyuk A**, Kirstein J, Ovaa H, Reits EA. Sci Rep. 2018 Jan 23;8(1):1405. doi: 10.1038/s41598-018-19538-0. PMID: 29362455

Polymorphisms/Mutations in A-Kinase Anchoring Proteins (AKAPs): Role in the Cardiovascular System. **Suryavanshi SV, Jadhav SM, McConnell BK.** J Cardiovasc Dev Dis. 2018 Jan 25;5(1). pii: E7. doi: 10.3390/ jcdd5010007. Review. PMID: 29370121

Creating a mouse model resistant to induced ischemic stroke and cardiovascular damage. Ling QL, Mohite AJ, Murdoch E, Akasaka H, Li QY, So SP, Ruan KH. Sci Rep. 2018 Jan 26;8(1):1653. doi: 10.1038/s41598-018-19661-y. PMID: 29374184

Development and validation of a sensitive LC-MS/MS method for simultaneous determination of eight tyrosine kinase inhibitors and its application in mice pharmacokinetic studies. **He Y**, Zhou L, Gao S, **Yin T**, **Tu Y**, Rayford R, Wang X, **Hu M**. J Pharm Biomed Anal. 2018 Jan 30;148:65-72. doi: 10.1016/j.jpba.2017.09.013. Epub 2017 Sep 11. PMID: 28965046