## UNIVERSITY of **HOUSTON**

**COLLEGE OF PHARMACY** 



Report to the Texas Pharmacy Congress — Nov. 11-12, 2015

### **UHCOP's New Home Scheduled for Completion in June 2017**

Construction on the UH College of Pharmacy's new home in the Health & Biomedical Sciences Building 2 (HBSB2) began in July. The building is due to be completed on June 28, 2017.

UHCOP will occupy approximately 138,000 square feet of the 200,000-square-foot, nine-story facility. Boston/Houston-based Shepley Bulfinch is the design architect and Tellepsen Builders, L.P., is the construction contractor on the \$145 million facility.

Highlights of UHCOP's professional program space in HBSB2 include state-of-the-art a Pharmacy Care and Compounding Lab; Sterile Products Lab; Simulation Suites (home care, inpatient and outpatient); and OTC Simulation/Patient Counseling Suite.

Among the new research areas will be Core Facilities for highthroughput screening, imaging, spectrometry, and analytical chemistry; Polymerase Chain Reactions (PCR) facility; Nuclear Magnetic Resonance (NMR) facility and molecular modeling; Ancillary labs, including centrifuge room, instrument room and



cell culture lab; individual bench labs; and health analytics.

Enhanced teaching and student facilities in HBSB2 include two large stadium-style classrooms; group study rooms; computer/study carrels; and a multi-purpose student lounge and event space.

## Houston Program's Pharmacy Leadership & Administration Degree Gets Official Approval

UH College of Pharmacy's M.S. in Pharmacy Leadership & Administration – the academic component of the Houston Program's concurrent M.S./PGY1-PGY2 in Health-System Pharmacy Administration – has been approved by the UH Board of Regents and the Texas Higher Education Coordinating Board.

Since its launch in 2009, the Houston Program has expanded from an initial five fellow Texas Medical Center institutions to seven leading TMC health system partners: CHI St. Luke's Health, Harris Health System, Houston Methodist Hospital, Memorial Hermann Healthcare System, Michael E. DeBakey Veterans Affairs Medical Center, Texas Children's Hospital and the University of Texas-MD Anderson Cancer Center. All of the PGY1 and PGY2 HSPA residency programs at the member institutions are accredited by ASHP.

The nearly 30 future leaders in health-system pharmacy who have graduated from the program can be found across the U.S., from California to Massachusetts. Projects undertaken in the program have yielded several publications in the American Journal of Health-system Pharmacy, and consecutive top resident awards from the TSHP Research & Education Foundation.



## UHCOP Honors Fry, Hopson for Service to Profession, Patients

UH College of Pharmacy recently bestowed its highest honors upon two exceptional alumni and leaders in pharmacy for their service to the college, their profession, their patients and the people of Texas. At the college's annual Mading Society event on Oct. 16, W. Benjamin Fry, R.Ph., FIACP, FACA, and The Honorable Charles L. "Chuck" Hopson, R.Ph., earned the UHCOP 2015 Meritorious Achievement Award and Hopson received the college's 2015 Distinguished Pharmacist Alumnus Award.

#### Student News .

Lei Wu, Ph.D., and Daping (Debbie) Zhang, former and current students of Professor Diana S-L. Chow, Ph.D., received the Student Abstract Awards at the American College of Clinical Pharmacology 2015 Annual Meeting Sept. 25-27





Zhang

in San Francisco. December 2014 Pharmaceutics graduate Wu, now a postdoctoral associate in Chow's lab, presented "Assessment of bioequivalence of intranasal scopolamine using population analysis in human subjects exposed to a simulated microgravity environment." Zhang's presentation was entitled "Explaining Variability in Pharmacokinetics of Mycophenolic Acid in Pediatric and Adult Patients with Hematopoietic Stem Cell Transplantation: from Plasma Protein Binding and Metabolic Perspectives."

Santosh Suryavanshi, a Pharmacology Ph.D. student of Associate Professor Bradley K. McConnell, Ph.D., FAHA, was recognized with the Lab Citizen Invitrogen Science Hero Award, one of nine awards sponsored by Invitrogen/ThermoFisher Scientific and presented Oct. 19 during the Society for Neuroscience 2015 Annual Meeting in Chicago.



Suryavanshi

Ahad Azimuddin, a UH Chemistry undergraduate student working in the lab of Associate Professor Bradley K. McConnell, Ph.D., FAHA, won the "Audience Choice Poster Award" for his presentation entitled "Cardiac Calcium Cycling in Fortilin Deficient Mice" at the 11th Annual UH Undergraduate Research Day Oct. 22.



Azimuddin

Prajakta Gadgil, a Pharmaceutics Ph.D. student of Professor Diana S-L. Chow, Ph.D., received a American Association of Pharmaceutical Scientists Pharmacokinetics, Pharmacodynamics, and Drug Metabolism Section Travelship Award to present her project, "Pharmacokinetics and Biodistribution with Enhanced Brain Delivery of Radio-Protective Agent Lazaroid Using Lipid Based Nano-formulation" at the AAPS 2015 Annual Metabolism and Protective Agent Lazaroid Using Lipid Based



Gadgil

Nano-formulation" at the AAPS 2015 Annual Meeting Oct. 25-29 in Orlando, Fla.

Graduate Research and Scholarship Projects (GRaSP) Day Oct. 30. Santosh Suryavanshi, a Pharmacology Ph.D. student of Associate Professor Bradley K. McConnell, Ph.D., FAHA, won the "People's Choice Award" for his presentation entitled "Absence of Gravin's Scaffolding Increases Cardiac Sensitivity to Calcium." Ruta Sawant, a Pharmaceutical Health Outcomes and Policy Ph.D. student of



Sawant

Associate Professor **Sujit Sansgiry**, Ph.D., received a Runner-Up award for her presentation entitled "Impact of Insulin Tier Status on Medication Adherence for MPD Beneficiaries."



The UHCOP Chapter of the American Pharmacists Association-Academy of Student Pharmacists won the 2014-15 Operation Heart Award at the Region 6 APhA-ASP Midyear Regional

Meeting Oct. 30-Nov. 1 in Kansas City, Mo. Pictured above are junior project chairs Pari Wafayee, left, and Caroline Root, right, and senior project chair Kay Yindeemark. In addition, P2 student **Katrina Watson** was elected Region 6 Member At-large and Pharm.D. candidate **Ashley Trojcak** was recognized as Outstanding Chapter Member from the UHCOP chapter.



Watson



At the Memorial Hermann 55+ Health Fair in Humble Oct. 6, UHCOP students provided more than 1,300 free seasonal flu immunizations and wellness screenings. such as blood pressure, blood glucose and cholesterol and diabetic foot, peripheral artery disease and mini mental status exams.

Two UHCOP students were recognized at the 2nd Annual UH

#### Faculty & Research News .

Two papers authored or coauthored by UHCOP faculty members were among the Top 10 Papers of the Year in Medical Mycology at the 2015 Interscience Conference on Antimicrobial Agents and Chemotherapy Sept. 17-21 in San Diego. "FKS Mutant Candida glabrata: Risk Factors and Outcomes in Patients With Candidemia" by Nicholas D. Beyda, Pharm.D., BCPS, UHCOP assistant professor, and coauthored by UHCOP Research Assistant Professor M. Jahangir Alam, Ph.D., and UHCOP Professor Kevin W. Garey, Pharm.D., M.S., FASHP. Garey also served as a coauthor on a paper entitled "T2 Magnetic Resonance Assay for the Rapid Diagnosis of Candidemia in Whole Blood: A Clinical Trial." Both papers were published in the journal Clinical Infectious Diseases.



Beyda



Garey

Greg D. Cuny, Ph.D., assistant professor, has received a five-year subcontract award of \$404,469 from Texas A&M University's School of Veterinary Medicine for a NIH project "Developing Therapeutics Against Giardia and Other Anaerobic Protozoa by Targeting Parasite Fatty Acyl-Coa Synthetase (ACS)," led by Professor Guan Zhu, Ph.D.



Cuny

E. James Essien, M.D., DrPH, FRSHP, professor, served as co-chairman of the Special Emphasis Panel "NIH-PEPFAR Collaboration on Implementation Science for HIV: Towards an AIDS-free Generation" of the NIH-Center for Scientific Review's AIDS and Related Research Integrated Review Group Oct. 26–27.



Essien

Pictured below, faculty members **Marc Fleming**, Ph.D., MPH, R.Ph.; **Louis Williams**, Ph.D.; and **Matthew A. Wanat**, Pharm.D., BCPS, were honored with the 2015 Rho Chi Society Beta Omicron Chapter's Teaching Excellence Awards.

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# College Sets New Record of \$7.6M for Research in FY15

UH College of Pharmacy achieved a new college record of \$7.64 million in grant support during the 2014-15 Fiscal Year, surpassing the previous record of slightly more than \$6 million in 2010.

Among the factors contributing to the year's success were several new multiyear R01 and R15 awards from the National Institutes of Health as well as the hiring of new faculty with significant current or post-appointment NIH funding awards.

**Kevin W. Garey**, Pharm.D., M.S., FASHP, professor, has received a one-year, \$62,400 grant from TechLab Inc. for a project to "Protocol for the Collection and Handling of Stool Specimens for Techlab Assay Development" and a one-year, \$60,787 grant from Accelerate Diagnostics to "Accelerate ID/AST System vs. Conventional Methods for Identification and Susceptibility of Gram-positive Bacteria."

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Ming Hu, Ph.D., professor, has received a two-year, \$174,931 supplement to his R01 NIH grant "Disposition of Flavonoids via Glucuronidation, Critical Role of Efflux Transporter" from the "Research Supplements to Promote Diversity in Health-Related Research" program.



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**Brian J. Knoll**, Ph.D., associate professor and assistant dean of Graduate Programs, has been appointed to serve on the Biochemistry, Biophysics & Structural Biology 1 predoctoral fellowship application review panel for the 2016 National Science Foundation Graduate Research Fellowship Program.



Knoll

Vincent H. Tam, Pharm.D., BCPS (AQ-ID), professor, has been elected to the Society of Infectious Diseases Pharmacists' Board of Directors. Tam also served as a presenter, panelist and member of the organizing committee of the 2nd International Conference on Polymyxins Sept. 22-24 in San Diego, Calif., following the 2015 Interscience Conference on Antimicrobial Agents and Chemotherapy meeting.



Tam

#### Recent Publications \_\_\_

Triple Recycling Processes Impact Systemic and Local Bioavailability of Orally Administered Flavonoids. Dai P, Zhu L, Luo F, Lu L, Li Q, Wang L, Wang Y, Wang X, **Hu M**, Liu Z. AAPS J. 2015 May;17(3):723-36. doi: 10.1208/s12248-015-9732-x. Epub 2015 Mar 12. PMID: 25762448

Determination of pharmacokinetics of chrysin and its conjugates in wild-type FVB and Bcrp1 knockout mice using a validated LC-MS/MS method. **Ge S, Gao S,** Yin T, **Hu M**. J Agric Food Chem. 2015 Mar 25;63(11):2902-10. doi: 10.1021/jf5056979. Epub 2015 Mar 13. PMID: 25715997

A combined strategy of mass fragmentation, post-column cobalt complexation and shift in ultraviolet absorption spectra to determine the uridine 5'-diphospho-glucuronosyltransferase metabolism profiling of flavones after oral administration of a flavone mixture in rats. Li Q, Wang L, Dai P, Zeng X, Qi X, Zhu L, Yan T, Wang Y, Lu L, **Hu M**, Wang X, Liu Z. J Chromatogr A. 2015 May 22;1395:116-28. doi: 10.1016/j. chroma.2015.03.069. Epub 2015 Apr 1. PMID: 25892633

UDP-Glucuronosyltransferases 1A6 and 1A9 are the Major Isozymes Responsible for the 7-O-Glucuronidation of Esculetin and 4-Methylesculetin in Human Liver Microsomes. Zhu L, Lu L, Zeng S, Luo F, Dai P, Wu P, Wang Y, Liu L, **Hu M**, Liu Z. Drug Metab Dispos. 2015 Jul;43(7):977-83. doi: 10.1124/dmd.115.063552. Epub 2015 Apr 8. PMID: 25854527

Discovery of LRRK2 inhibitors using sequential in silico joint pharmacophore space (JPS) and ensemble docking. Lang CA, Ray SS, Liu M, Singh AK, **Cuny GD**. Bioorg Med Chem Lett. 2015 Jul 1;25(13):2713-9. doi: 10.1016/j.bmcl.2015.04.027. Epub 2015 Apr 16. PMID: 25998502

Prevention by Regular Exercise of Acute Sleep Deprivation-Induced Impairment of Late Phase LTP and Related Signaling Molecules in the Dentate Gyrus. **Zagaar MA**, **Dao AT**, **Alhaider IA**, **Alkadhi KA**. Mol Neurobiol. 2015 Apr 23. [Epub] PMID: 25902862

Educating Pharmacists on a Prescription Drug Monitoring Program. **Fleming ML, Phan Y, Ferries EA, Hatfield MD.** J Pharm Pract. 2015 May 6. pii: 0897190015579448. [Epub] PMID: 26153423

Upregulation of ER Signaling as an Adaptive Mechanism of Cell Survival in HER2-Positive Breast Tumors Treated with Anti-HER2 Therapy. Giuliano M, **Hu H**, Wang YC, Fu X, Nardone A, Herrera S, Mao S, Contreras A, Gutierrez C, Wang T, Hilsenbeck SG, De Angelis C, Wang NJ, Heiser LM, Gray JW, Lopez-Tarruella S, Pavlick AC, **Trivedi MV**, Chamness GC, Chang JC, Osborne CK, Rimawi MF, Schiff R. Clin Cancer Res. 2015 Sep 1;21(17):3995-4003. doi: 10.1158/1078-0432. CCR-14-2728. Epub 2015 May 26. PMID: 26015514

Developing an activity and absorption-based quality control platform for Chinese traditional medicine: Application to Zeng-Sheng-Ping(Antitumor B). Yin T, Yang G, **Ma Y**, Xu B, **Hu M**, You M, **Gao S**. J Ethnopharmacol. 2015 Aug 22;172:195-201. doi: 10.1016/j. jep.2015.06.019. Epub 2015 Jun 20. PMID: 26099633

Preferences and Outcomes for Chemotherapy Teaching in a Postgraduate Obstetrics and Gynecology Training Program. Anderson ML, Ogunwale A, Clark BA, Kilpatrick CC, **Mach CM**. J Surg Educ. 2015 Sep-Oct;72(5):936-41. doi: 10.1016/j.jsurg.2015.04.008. Epub

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Factors associated with intention to engage in self-protective behavior: The case of over-the-counter acetaminophen products. **Sawant RV**, **Goyal RK**, Rajan SS, **Patel HK**, **Essien EJ**, **Sansgiry SS**. Res Social Adm Pharm. 2015 Jul 2. pii: S1551-7411(15)00122-9. doi: 10.1016/j. sapharm.2015.06.005. [Epub] PMID: 26183416

Cardiac myosin binding protein C regulates postnatal myocyte cytokinesis. Jiang J, Burgon PG, Wakimoto H, Onoue K, Gorham JM, O'Meara CC, Fomovsky G, **McConnell BK**, Lee RT, Seidman JG, Seidman CE. Proc Natl Acad Sci U S A. 2015 Jul 21;112(29):9046-51. doi: 10.1073/pnas.1511004112. Epub 2015 Jul 7. PMID: 26153423

Epinephrine Activation of the ß2-Adrenoceptor Is Required for IL-13-Induced Mucin Production in Human Bronchial Epithelial Cells. Al-Sawalha N, Pokkunuri I, Omoluabi O, Kim H, Thanawala VJ, Hernandez A, Bond RA, Knoll BJ. PLoS One. 2015 Jul 10;10(7):e0132559. doi: 10.1371/journal.pone.0132559. eCollection 2015. PMID: 26161982

Age-Stratified Treatment Response Rates in Hospitalized Patients with *Clostridium difficile* Infection Treated with Metronidazole. Pham VP, Luce AM, Ruppelt SC, Wei W, **Aitken SL**, Musick WL, Roux RK, **Garey KW**. Antimicrob Agents Chemother. 2015 Oct;59(10):6113-6. doi: 10.1128/AAC.00816-15. Epub 2015 Jul 20. PMID: 26195522

Risk of Dementia Among Elderly Nursing Home Patients Using Paroxetine and Other Selective Serotonin Reuptake Inhibitors. **Bali V, Chatterjee S,** Carnahan RM, **Chen H, Johnson ML, Aparasu RR.** Psychiatr Serv. 2015 Aug 3:appips201500011. [Epub] PMID: 26234334

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Knock-in mice harboring a Ca(2+) desensitizing mutation in cardiac troponin C develop early onset dilated cardiomyopathy. **McConnell BK, Singh S, Fan Q**, Hernandez A, Portillo JP, Reiser PJ, **Tikunova SB**. Front Physiol. 2015 Aug 27;6:242. doi: 10.3389/fphys.2015.00242. eCollection 2015. PMID: 26379556

Analytical and Functional Determination of Polymyxin B Protein Binding in Serum. **Abodakpi H, Gohlke J, Chang KT, Chow DS, Tam VH.** Antimicrob Agents Chemother. 2015 Nov;59(11):7121-3. doi: 10.1128/AAC.01815-15. Epub 2015 Aug 31. PMID: 26324262