



Report to the Texas Pharmacy Congress — Nov. 12, 2020

Thornton, PREMIER Center Receive \$3.34M Supplement for Texas Targeted Opioid Response Program

UHCOP's Douglas Thornton, Pharm.D., Ph.D., BCPS, assistant professor and director of The PREMIER Center, has been awarded a \$3.34 million supplement for his work distributing single-use drug disposal systems and educating the community on their use in an effort to reduce opioid- and prescription drug misuse across the state.

Now funded at a total of \$6.68 million, the work done by Thornton and his PREMIER Center team is part of the Texas Health and Human Services Commission's Texas Targeted Opioid Response (TTOR) Program funded by the U.S. Substance Abuse and Mental Health Services Administration.

In the first phase, the project team and its

community partners distributed the single-use disposal systems (SUDS) at nearly 500 events with total attendance over 36,000 as well as to fire departments and community pharmacies across Texas.

In this next phase, Thornton said he will develop more targeted distribution methods and compare them to identify the most effective groups and methodologies.

"We want to establish some best practices of the top performers, so we can continuously improve our distribution," said Thornton, who also was invited to present at the Oct. 29 White House Virtual Roundtable on Mak-



ing Prescription Drug Take Back Day Every Day organized by the White House Office of National Drug Control Policy.

"We're taking the extra step to examine what events are the most successful and how can we help facilitate the better use of these products by patients, so they're not used inappropriately or not used at all."

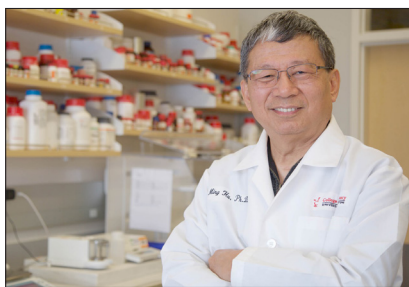
Thornton's team includes Matthew Wanat, Pharm.D., BCPS, BCCCP, FCCM, faculty member and PREMIER Center assistant director; Danielle Campbell, RCP, PMP, and Jessica Price, PREMIER Center support staff; Tamara Al Rawwad, Ph.D., post-doctoral fellow; students Shweta Bapat, Callie Downs, Tyler Varisco, Pharm.D., and Vaishnavi Tata.

NCI Awards Hu \$996K to Study Chinese Herbal Medicine to Alleviate Side Effects of Chemotherapy

Ming Hu, Ph.D., professor of pharmaceuticals and Diana S-L. Chow Endowed Professor of Drug Discovery and Development, has been awarded a five-year, \$996,162 grant from the National Cancer Institute to study an ancient Chinese herbal formulation as a potential therapeutic or supplement to reduce irinotecan-induced gut toxicities.

Hu is studying mechanistic and pharmacokinetic properties of the herbal formulation called Xiao-Chai-Hu-Tang (XCHT), a compound of seven herbs that has been used for hundreds of years in China and Japan to relieve chronic liver disease and other ailments.

Hu's aim is to reduce or prevent severe delayed-onset diarrhea (SDOD) so



patients experience less side effects and perhaps even better therapeutic efficacy when receiving the late-stage chemotherapy agent irinotecan, a prodrug of SN-38.

Hu's previous research found that inactivation of intestinal UDP-glucuronosyltransferases (UGTs) by SN-38 is a new mechanism by which SN-38 causes SDOD, and that XCHT may attenuate the decline in UGT activities, reduce gut SN-38 exposure, and promote the recovery of gut UGT activities.

Hu's team includes fellow UHCOP faculty member Romi Ghose, Ph.D., Texas Southern University faculty member Song Gao, Ph.D., and Guangzhou University of Chinese Medicine in China faculty member Lijun Zhu.

'PAI Week' Program Earns National Award for SSHP Chapter

The UH College of Pharmacy Chapter of the Student Society of Health-System Pharmacists (SSHP) has been honored with the 2019-20 Outstanding Professional Development Project Award by the American Society of Health-System Pharmacists (ASHP).

The chapter was recognized for its Practice Advancement Initiative (PAI) Week activities in February 2020. The award isn't the first time the UHCOP Chapter has been recognized for its PAI efforts. Last year, the chapter received an honorable mention in the award competition and was named a finalist in a separate PAI Video Competition.

The PAI comprises a variety of recommendations centered around five "pillars": Care Team Integration, Leveraging Pharmacy Technicians, Pharmacist Credentialing and Training, Technology, and Leadership in Medication Use.

Aparasu Receives \$450K NIA Grant to Study Prescribing Cascade in Alzheimer’s Dementia Patients

UHCOP’s Rajender Aparasu, Ph.D., FAPhA, has been awarded a \$450,000 National Institute on Aging grant to study the prescribing cascade and associated interactions among older adults with Alzheimer’s disease (AD).



peutically opposing mechanism of actions. Further, this worsening of AD can precipitate additional cascades, including prescribing of memantine for moderate-to- severe AD, and/or antipsychotics to manage

behavioral symptoms of AD, and/or may lead to Serious Adverse Events.

Multi-year multistate Medicare data involving Parts A, B, and D will be used in the analyses, and concomitant ChEI-antimuscarinic users will be compared with concomitant users of ChEIs and mirabegron, a non-anticholinergic alternative.

Aparasu said the study will have significant clinical and policy implications for preventing, detecting, and reversing prescribing cascades in AD.

Although of modest effectiveness in AD, first-line pharmacotherapy with cholinesterase inhibitors (ChEIs) often leads to adverse events, especially urinary incontinence.

The ChEI-induced incontinence often is followed by concomitant administration of antimuscarinics, with the subsequent drug-drug interaction tending to nullify the modest treatment benefit of ChEIs and worsen AD due to the thera-

Adherence Projects Draw AMCP Medals for Ph.D. Students

Two Ph.D. students were recognized with Gold and Bronze medals at the Academy of Managed Care Pharmacy 2020 Nexus Virtual meeting Oct. 20-23 for their projects delving into the relationship between motivational interviewing interventions and medication adherence.

Ph.D. students Anjana Mohan, MPharm., earned a Gold Medal for her project, “Impact of Motivational Interviewing Intervention in Texas Medicare Advantage Patients with Hypertension.” Zahra Majd, Pharm.D., received a Bronze medal for her project, “Predicting Future Adherence to Statins Using Previous Adherence to Antihypertensive Drugs.”

The abstracts of both projects were published in the October 2020 Journal of Managed Care & Specialty Pharmacy’s (JMCP) Poster Abstracts supplement.

Four Ph.D. students received Scholar-in-Training Awards from the American Association for Cancer Research to present their projects at the AACR Virtual Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved Oct. 2-4. The student recipients are their project titles are:

- **Lorita Agu**, “Population pharmacokinetics of vincristine and its metabolite in Kenyan pediatric cancer patients”;
- **Victor Lincha**, Pharmaceutics doctoral program candidate, “Co-modeling calcipotriol and paclitaxel in blood and tissues of a Kras mouse model of pancreatic cancer after an IV bolus dose of a micellar co-formulation”;
- **Anjana Mohan**, Pharmaceutical Health Outcomes and Policy doctoral program candidate, “Evaluating medication adherence & its predictors among breast cancer survivors on oral endocrine therapy in a large academic medical center”;
- **Soham Yande**, Pharmaceutical Health Outcomes and Policy doctoral program candidate, “Racial and ethnic differences in capecitabine in colorectal cancer patients.”

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August graduate **Jagadesh Rao Earla**, Ph.D., Pharm.D., MBA, M.S., and Ph.D. student **Shrey Gohil** were awarded ICPE All Access 2020 scholarships from the International Society for Pharmacoepidemiology (ISPE) to make oral presentations of their respective projects, “Comparative treatment effectiveness of oral fingolimod and injectable disease-modifying agents in multiple sclerosis,” and “Interventions to Improve Medication Adherence in Patients with Inflammatory Bowel Disease: A Systematic Review.”

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Three P2 Pharm.D. students — **Dana Elder**, **Sukaina Makzoumi** and

Simin Dokht Sadeghi — are undertaking service projects through the 2020-21 Houston-Galveston Albert Schweitzer Fellowship Program.

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Alan Luu, Pharm.D. candidate, has been honored with the Gulf Coast Society of Health-System Pharmacists’ 2020 Outstanding Student Award.

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May graduate **Aimen Naveed**, Pharm.D., now a first-year resident in the The Froedtert & the Medical College of Wisconsin PGY1/PGY2 pharmacy administration residency program, and **Michael Toraño**, a P2 Pharm.D. student, have been awarded scholarships from the TSHP Research & Education Foundation. Naveed was awarded the Sandra Evans Webb Scholarship and Toraño received the Gulf Coast Society of Health-System Pharmacists Leadership Scholarship.

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Ph.D. student **Hanan Qasim** won the Graduate Student category for her oral presentation in the American Society for Pharmacology and Experimental Therapeutics’ Division of Cardiovascular Pharmacology Trainee Showcase Oral Presentation Competition Sept. 29. Qasim presented her project, “Cardiac AKAP12 Signalosome Overexpression Exacerbates Isoproterenol Induced Heart Failure,” which was recognized as an ASPET “Blue Ribbon” selection and among the published abstracts in the Journal of the Federation of American Societies of Experimental Biology’s April 2020 Experimental Biology abstracts supplement. Qasim also received the UH Cullen Graduate Leadership Award for her work with the UH Graduate & Professional Student Organization.

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Rhea Soltau, Pharm.D. candidate, has been selected for the inaugural Phi Lambda Sigma Pharmacy Leadership Society’s PLS Leader Academy.

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College Welcomes Cardiology Pharmacology Researcher Mingfu Wu

UHCOP recently welcomed cardiology pharmacology researcher Mingfu Wu, Ph.D., to the faculty as an associate professor in the Department of Pharmacological & Pharmaceutical Sciences.

Wu joins the college from Albany Medical College in Albany, N.Y., where he served in the Department of Cellular and Molecular Physiology (Center of Cardiovascular Science) since 2011. After earning his Ph.D. in biology from Kansas State University, Wu completed postdoctoral training at Duke University in Durham, N.C., and UT Southwestern Medical Center in Dallas.

With a primary research interest in the etiology and treatment of the left ventricular non-compaction cardiomyopathy and congenital heart defects, Wu recently was awarded a five-year, \$1.75 million renewal grant from the National Heart, Lung and Blood Institute for his project, "Signaling by $\beta 1$ integrins regulates ventricular wall morphogenesis and compaction."

Wu's lab is exploring the molecular mechanisms of the genetic disorder LVNC, which occurs when the sheet-like muscle fibers that extend



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into the lower left chamber of the developing heart (called trabeculations) fail to compact into normal, solid heart muscle.

Occurring with or without symptoms, LVNC can be fatal in the developing fetus and cause heart failure and arrhythmia in adults. First diagnosed in the early 1980s, LVNC remains a diagnostic and therapeutic challenge for researchers and clinicians.

Wu is currently wrapping up work on his previous five-year NHBLI project funded at \$1.975 million, "Number Family Proteins Regulate Trabecular Development." He also serves as mentor for a American Heart Association-funded postdoctoral fellow Lianjie Miao, Ph.D.

Wu has authored/coauthored research papers published in such peer-reviewed journals as Proceedings of the National Academy of Sciences of the United States of America (PNAS), Nature Scientific Reports, and Cell Reports, and presented at the American Heart Association Scientific Sessions, Weinstein Cardiovascular Development Conference and the American Chemical Society.

UH Pharmacy, Medicine Team on SAMHSA-funded Substance Use Disorder Training

UHCOP's Austin De La Cruz, Pharm.D., BCPP, clinical assistant professor, and Tamara Al Rawwad, Ph.D., postdoctoral fellow, have been awarded a two-year, \$200,000 grant from the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) to develop and integrate substance use disorder (SUD) education into professional pharmacy and medicine curricula.

The project aims to provide interdisciplinary and interprofessional, evidence-based training to Pharm.D. and medical students related to SUDs; enhancing pharmacy and medicine programs' capacity to provide standardized education and training related to SUDs; and expand the integration of SUDs education into pharmacy and medical programs and licensing exams.

Within the context of the Pharm.D. curriculum, students' training on counseling patients and monitoring medication-use outcomes will be

combined with training on understanding patients using a biopsychosocial framework.

Newly licensed pharmacists with enhanced SUDs education will bring their training and expertise to various healthcare institutions, further expanding SUDs prevention, assessment, and referral. Additionally, pharmacists will be more prepared to be involved with their community and assume roles in leadership and service involving substance misuse/dependence prevention and education. Lastly, when treating SUDs, the addition of a pharmacist into a team-based care practice model can improve patient outcomes and reduce the SUDs treatment gap.

Other members of the project team include UHCOP faculty members Matthew A. Wanat, Pharm.D., BCCCP, FCCM, and Douglas Thornton, Ph.D., Pharm.D., BCPS, and UH College of Medicine faculty members Bill Elder, Ph.D., and Steven Starks, M.D.

Kim K. Birtcher, Pharm.D., M.S., BCPS (AQ Cardiology), CDCES, FNLA, clinical professor, recently retired after 18 years of full-time service, teaching and research at the college.

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Several UHCOP faculty members received promotions effective Sept. 1: **Hua Chen**, M.D., Ph.D., professor; **Catherine L. Hatfield**, Pharm.D., clinical professor; **Bradley K. McConnell**, Ph.D., FAHA, FCVS, professor; **Nancy O. Ordonez**, Pharm.D., BCPS, clinical professor; and **Amelia Sofjan**, Pharm.D., BCPS, clinical associate professor.

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Kevin W. Garey, Pharm.D., M.S., FASHP, professor, has been appointed to a three-year term *Antimicrobial Agents and Chemotherapy* editorial board. Garey also is part of a multi-institutional Texas Medical Center research collaboration that has received a five-year, \$2.4 million National Institute of Allergy and Infectious Diseases grant for its "Dynamics of Colonization and Infection by Multidrug-Resistant Pathogens in Immunocompromised and Critically Ill Patients (DYNAMITE) Program."

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Catherine L. Hatfield, Pharm.D., clinical professor and director of interprofessional education, will be inducted as a Distinguished Fellow of the National Academies of Practice in Pharmacy at the NAP's 2021 Annual Meeting & Forum in Washington, D.C. Hatfield is a member of the Texas Interprofessional Education Consortium and a speaker for the organization's statewide TeamsSTEPPS® training program in which she is certified as a Master Trainer.

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Ming Hu, Ph.D., has received a \$116,563 grant from Gilead Determination of Intestinal Excretion of Gilead Research Compounds Using a Well-characterized Modified Perfused Rat Intestinal Model"; and a \$80,000 subaward from Texas Southern University on the Cancer Prevention and Research Institute of Texas-funded project "Alleviating SN-38-Induced Late-Onset Diarrhea by Preserving Local UGTs in the Colon."

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