



College of Pharmacy  
UNIVERSITY OF HOUSTON

Report to the  
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## Tam Receives \$3.96M NIH Grant, Recognition from ACCP and SIDP

UHCOP Professor **Vincent H. Tam**, Pharm.D., FIDSA, BCIDP, FIDP, has had an impressive year, securing a major National Institutes of Health grant as well as recognition from two national organizations.

Tam recently received a five-year, \$3.96 million grant from the National Institute of Allergy and Infectious Diseases to further his collaborative project to develop a novel platform based on mathematical modeling to guide clinicians in optimal antimicrobial drug combinations without knowing a pathogen's specific resistance mechanisms.

He plans to first identify useful antibiotic combinations against multidrug resistant bacteria and then validate the mathematical model predictions with clinical outcomes.

Although initially targeting gram-nega-



tive bacterial infections, Tam believes the dynamic platform can be applied to other antibiotics as well as antifungal and antiviral therapeutics.

Co-investigators include UH's Michael Nikolaou, professor of chemical and biomolecular engineering, and William Musick of Houston Methodist Hospital and Truc

Cecilia Tran of the Houston Methodist Research Institute.

Tam was also selected to receive the 2024 American College of Clinical Pharmacy (ACCP) Therapeutic Frontiers Lecture Award. The award and his accompanying lecture, "Personalized Combination Antimicrobial Therapy," were presented during the ACCP 2024 Annual Meeting Oct. 12-15 in Phoenix, Ariz.

At the Society of Infectious Diseases Pharmacists (SIDP) Annual Meeting Oct. 15 in Los Angeles, Tam was recognized as a Fellow of the SIDP. Fellow status is bestowed on active members with at least 10 years of practice in the field who have made sustained contributions to SIDP and demonstrated leadership and collaboration.

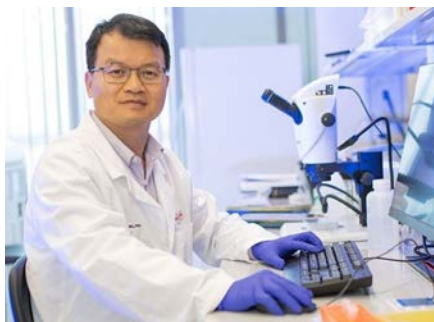
## Wu Receives \$2.6M NHLBI Grant for 'Spongy Heart' Research

Associate Professor **Mingfu Wu**, Ph.D., has been awarded \$2.6 million from the National Heart, Lung, and Blood Institute to further his research on how the heart forms in the womb.

The findings may lead to the development of new medicines to fight left

ventricular non-compaction, also known as "spongy heart" disease. Wu's research will focus on tiny tube-like structures, called signaling bridges, discovered by his team.

Wu previously found the absence of a certain gene, *Itgb1*, may cause the develop-



Associate Professor Mingfu Wu's research into the cause of left ventricular non-compaction (LVNC, or 'spongy heart') is being supported by a new NIH grant.

ing heart unable to maintain its shape and develop normally, causing a spongy heart.

During heart development, effective communication between the myocardium and the endocardium is essential for forming the inner ridges (trabeculae).

"Via genetic

labeling, electron microscopy and cryogenic-EM, our preliminary data show a nanotube-like microstructure extends from cardiomyocytes across cardiac jelly to reach endocardial cells temporally and these signaling bridges are sufficient to activate Notch signaling," Wu said.

## College Develops National OUD Guidelines

Thanks to a two-year, \$572,278 grant from the Foundation for Opioid Response Efforts, Assistant Professor **Tyler Varisco**, Ph.D., Pharm.D., spearheaded the creation of new national guidelines in the treatment of Opioid Use Disorder (OUD).

The Pharmacy Access to Resources and Medication (PhARM)-OUD Guideline aims to increase and ultimately improve health outcomes for individuals receiving OUD treatment.

The guidelines were developed with input from psychiatrists, psychiatric pharmacists, and representatives from the National Association of Boards of Pharmacy and the National Community Pharmacists Association.

## UHCOP Bestows Highest Honors to Ginsburg, Williams

The college bestowed the Alumnus Pharmacist of the Year Award to Diane B. Ginsburg, Ph.D., M.S. ('90), R.Ph., FASHP, and the Meritorious Achievement Award to Louis Williams, Ph.D., at the 2024 Mading Society Induction & Dinner Oct. 4.

Ginsburg serves as associate dean for healthcare partnerships, clinical professor in the division of pharmacy practice, and G.D. Searle Endowed Fellow in Pharmacy at The University of Texas at Austin College of Pharmacy.

Internationally known for her work on



ethics and the legal and regulatory aspects of pharmacy and health care, she most recently was named the 2024 American Society of Health-System Pharmacists' Harvey A.K. Whitney Lecture Award recipient.

An associate professor of medicinal chemistry at UHCOP, Williams was recognized for his contributions to excellence in education, research and service over his 50 years at the college.

A former U.S. Fulbright Senior Research & Teaching Scholar, Williams has been honored with teaching and service awards at the university and college level. He also has earned honors from the Kappa Psi Pharmaceutical Fraternity and the Student National Pharmaceutical Association for which he has served as a local chapter advisor for decades.

## Student News

### SNPhA Takes Near-Sweep of National Initiative Awards, Top 2 Spots in Clinical Skills

The UHCOP Chapter of the Student National Pharmaceutical Association (SNPhA) claimed multiple honors at the SNPhA National Conference Aug. 9-12 in Los Angeles.

Besting its 2023 award tally, the chapter won seven of eight possible National Initiative Awards this year: Operation Immunization, Project Keepsake (chronic kidney disease awareness), Mental Health, Fighting Diabetes, Power to End Stroke, Bridging the Gap (representing the chapter's Prepharmacy Association Liaisons and Community Outreach Initiative), and Remember the Ribbon (HIV/AIDS education).



UHCOP chapter members swept first and second place in the Kroger Clinical Skills Competition, while another member was among the Top 6 AstraZeneca MSL Competition finalists. Five national scholarships were awarded to UHCOP members. The chapter also was among the Top 3 Large Chapter of the Year category finalists, and finished third in the National Scrapbook Competition.

After the chapter delegate successfully defended a resolution for establishing a ninth national initiative titled "Combating Cancer," the national executive board is expected to consider the proposition.

### Students Initiate Local Chapters of Consulting, Psychiatric Pharmacy Organizations

In response to growing interest in geriatric and consulting patient care environments and the treatment of mental health disorders, UHCOP students have established college chapters of the American Society of Consultant Pharmacists (ASCP) and the American Association of Psychiatric Pharmacists (AAPP).



The inaugural members of the American Society of Consultant Pharmacists show their Cougar spirit.

Goals of the chapter include raising awareness of the opportunities in consultant pharmacy among students, other health care professionals and the community members. The ASCP chapter's initial projects include convocations with speaker panels and collaborating with occupational therapists to engage with nursing home residents in games to aid their mobility and well-being.

Clinical Associate Professor Julianna Fernandez, Pharm.D., BCGP, and Nancy Ordonez, Pharm.D., BCPS, serve as the chapter's faculty advisors.

Among the goals of the AAPP chapter are to empower students to learn more about mental health diseases and disparities, promote the profession, and decrease the stigma around mental health illnesses in society.



Faculty advisor Austin De La Cruz, far left, and inaugural members of the UHCOP Chapter of the American Association of Psychiatric Pharmacists.

Planned activities include hosting tabling events to educate students on such topics such as seizure first aid, mindful eating habits, and autism awareness.

Clinical Associate Professor Austin De La Cruz, Pharm.D., BCPP, serves as the chapter's faculty advisor.

## College Welcomes 7 New Faculty Members Across 3 Departments

### Department of Pharmaceutical Health Outcomes and Policy

**Jieni Li, Ph.D.**, research assistant professor, has worked as a postdoctoral fellow at UHCOP since her graduation in May from the college's Ph.D. in Pharmaceutical Sciences program, with a PHOP concentration. Li's dissertation focused on multiple sclerosis (MS) treatment options that evaluated the effectiveness and safety of disease-modifying therapies using real-world data.



She previously earned a master of public health from Washington University in St. Louis and a bachelor's degree in chemistry from the University of Illinois at Urbana-Champaign. During her time as a student, Li served as president of the UHCOP Chapter of the International Society of Pharmacoeconomics and Outcomes Research (ISPOR) and was appointed to the ISPOR Student Network Committee Survey and Evaluation Committee.

**Xi (Lucy) Lu, Ph.D.**, assistant professor, earned a bachelor's degree in mathematics and applied mathematics at East China Normal University in Shanghai, China, a master's degree in statistics from Columbia University, and recently completed her Ph.D. in statistics from Kansas State University, where she served as a graduate teaching assistant. Her doctoral dissertation was on "Robust Bayesian methods to sparse high-dimensional regression."



Lu's research focus is on statistical machine learning for high/ultra-high dimensional data, robust Bayesian variable selection for cancer genomics data, and robust methods in mixed effects model for longitudinal studies, robust variable selection in survival analysis, and robust regularized variable selection and its applications for multi-omics data analysis.

### Department of Pharmacological and Pharmaceutical Sciences

**Wei Gao, Ph.D.**, assistant professor of pharmacology, completed undergraduate and master's degree programs at the China Pharmaceutical University in Nanjing, China; a master's degree program at the University of Calabria, School of Pharmacy in Arcavacata, Italy; and a Ph.D. degree program at the Peking University Health Science Center School of Pharmaceutical Science in Beijing, China.



Gao joins UHCOP from the University of Michigan, where she most recently worked as an assistant research scientist since 2022 and a postdoctoral research fellow from 2017 to 2021. Gao's research focuses on developing nanomedicines and nanovaccines to modulate B cells and myeloid cells in cancer and other immune-related diseases. Gao is part of a multi-principal investigator project team supported by a five-year, \$2.6 million grant from the National Cancer Institute.

**Thomas W. Hanigan, Ph.D.**, assistant professor of medicinal chemistry, earned his B.S. in chemistry and materials engineering from Iowa State University and his Ph.D. in medicinal chemistry from the University of Illinois.



Hanigan joins UHCOP from the Scripps Research Institute, where he worked as a postdoctoral associate in the laboratory of Professor Ben Cravatt, Ph.D., using chemical proteomics to identify first-in-class small molecules targeting the mitochondrial insertase OXA1L. Hanigan's research leverages his background in chemical biology to identify novel cancer vulnerabilities resulting from the collateral amplification or deletion of essential metabolic enzymes during tumorigenesis.

**Dakshina (Moody) Jandhyala, Ph.D.**, director of Core Research Labs and Facilities, has been appointed as a research assistant professor. Jandhyala earned a bachelor's degree in biology at the University of Texas at Austin and a Ph.D. in molecular biology from UH's College of Natural Sciences and Mathematics.



Jandhyala joined UHCOP in 2017 to serve as manager over Core Research Labs and Facilities, which included managing the use, training and maintenance of a variety of advanced analytical, imaging and other equipment at the college's home in the then-newly opened Health 2 building. Jandhyala's research has focused on identifying novel therapeutic targets to block inflammatory and apoptotic signaling with the goal of treating toxin-mediated diseases.

**Yunting Wang, Ph.D.**, research assistant professor, earned a bachelor's degree in traditional Chinese medicine from Hunan University of Chinese Medicine in Changsha, China, and both a master's degree in medicine degree in orthopedics of traditional Chinese medicine and a Ph.D. in Chinese pharmacology from Guangzhou University of Chinese Medicine in Guangzhou, China.



Wang is no stranger to UHCOP, having been a visiting research scholar from 2018 to 2020, when he transitioned to postdoctoral fellow status. Wang's research focuses on investigating the role of lysosomal function in vascular resident cell dysfunction and its contribution to the pathophysiological mechanisms of various macrovascular and microvascular diseases.

### Department of Pharmacy Practice and Translational Research

**Abdulwhab (Abe) Shremo Msdi, Pharm.D.**, research assistant professor, joins UHCOP from Loma Linda University in California, after completing a two-year infectious disease fellowship program. He earned a bachelor's degree from the University of Kalamoon in Damascus, Syria, and his Pharm.D. from Palm Beach Atlantic University Lloyd L. Gregory School of Pharmacy in Florida.



After graduation, he completed a PGY1 pharmacy practice residency at the Orlando Regional Medical Center. His areas of research encom-

pass the impact of the microbiome on chronic diseases and recurrent infections, as well as the translational pharmacokinetic and pharmacodynamic facets of antimicrobial therapy.

Shremo Msdi is a past recipient of the American College of Clinical Pharmacy Annual Meeting Resident/Fellow Travel Award and the National Association of Boards of Pharmacy's PCOA Outstanding Performance Award with Distinction for Scoring in the Top 95th and Higher Percentile.

## Recent Publications

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