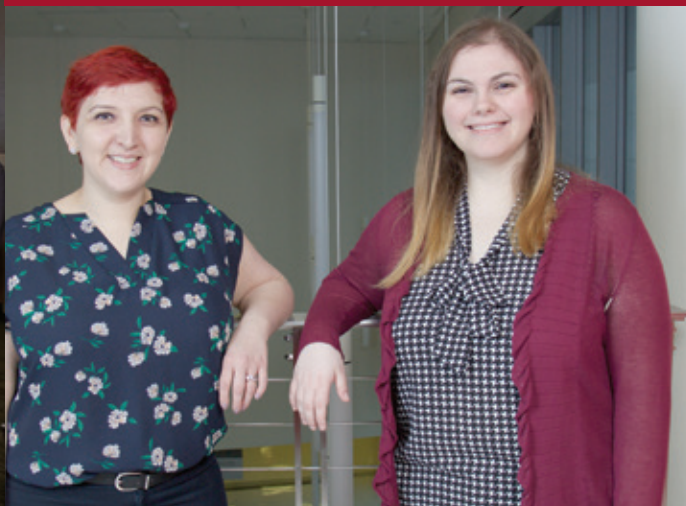


INTERACTIONS

University of Houston College of Pharmacy | Volume 13

UHCOP STUDENT PRIDE



UNIVERSITY of **HOUSTON**
COLLEGE OF PHARMACY

A message from DEAN PRITCHARD



General George Washington once said, “Remember that it is the actions, and not the commission, that make the officer, and that there is more expected from him than the title.” Notable actions and results are very important aspects associated with great leadership. Our University of Houston College of Pharmacy has long held the importance of nurturing and cultivating great leadership among our students, faculty, staff and alumni in very high regard. Over the years, this concerted effort has resulted in many laudable accolades for the College. For example, five of our UHCOP family have served as National Presidents of Phi Lambda Sigma (PLS), the national pharmacy leadership society. Below I will discuss a mere sampling of important accolades that have been received in the past five years.

Outstanding UHCOP faculty members have been recognized over the past five years for their important contributions and leadership. Dr. Diana Chow and Dr. Ruiwen Zhang have been named as Fellows of the National Academy of Inventors for their important contributions in the area of drug discovery. Dr. Randall Prince and Dr. Vincent Tam have been named as Fellows of the Society of Infectious Diseases Pharmacists for their outstanding contributions to infectious diseases research. Dr. Matthew Wanat has been named a Fellow of the Academy of Critical Care Medicine for his contributions to this important field. Dr. Richard Bond has been named a Fellow of the British Pharmacological Society for his outstanding innovative research that redirected global treatment strategies associated with several important disease states. Finally, Dr. Vincent Tam was recognized during the General Session of the ASHP Midyear meeting last month as he received the prestigious ASHP Foundation Literature Award for Sustained Contributions in the field of pharmacy research.

Outstanding UHCOP students and student organizations have been recognized over the past five years for their outstanding work and leadership. Our UHCOP Student College of Clinical Pharmacy (SCCP) Chapter has been recognized as the National Outstanding Student Chapter for the past two years. This is the first time that a single chapter has won this prestigious national award in two consecutive years. The UHCOP Student National Pharmaceutical Association (SNPhA) Chapter has been named as the National Chapter of the year four of the past five years. UHCOP SNPhA members Darian Allen and Gifty Gyebi were elected as SNPhA National President and Vice President, respectively. Our Phi Lambda Sigma (PLS) Chapter has been named as National Chapter of the Year for two of the past five years.

Leadership development continues to flourish at our UHCOP thanks to the hard work, dedication and passion on behalf of our wonderful profession ... because society expects so much from us ... other than the mere title of Professional Pharmacist.

Longue vie et prospérité.

F. Lamar Pritchard
F. Lamar Pritchard, Ph.D., R.Ph.

INTERACTIONS

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**PARNA
HAGHPARAST**



**TYLER MARIE
KILES**



**JOSHUA
WOLLEN**

ACADEMIC FELLOWS

PROGRAM ENHANCES CURRICULUM ROLL-OUT, EDUCATOR POOL

Created to assist in the transition and development of future pharmacy educators and help the College implement its new Doctor of Pharmacy (Pharm.D.) curriculum in fall 2018, UH College of Pharmacy welcomed its first cohort of Academic Pharmacy Fellows.

The fellowship is a 12-month program to prepare pharmacists for a career in pharmacy education through training in teaching, curriculum development, college service, mentoring, scholarship and clinical practice.

Parna Haghparast earned her Pharm.D. degree from Rutgers University and completed a PGY-1 residency at The University of Texas Medical Branch-Correctional Managed Care (UTMB-CMC), where she worked in a variety of pharmacist-run clinics focused on asthma, chronic obstructive pulmonary disease (COPD),

chronic kidney disease, diabetes and psychiatry. After joining UHCOP, Haghparast earned her Board Certified Pharmacotherapy Specialist credential from the Board of Pharmacy Specialties.

After receiving her Pharm.D. degree from UHCOP in 2016, Tyler Marie Kiles completed a PGY1 Community Pharmacy Residency with Mercer College of Pharmacy and Rite Aid in Atlanta, Ga., and worked as an assistant pharmacy manager for Kroger. During her fellowship at UHCOP, Kiles earned her Board Certified-Advanced Diabetes Management credential from the American Association of Diabetes Educators.

Joshua Wollen earned his Pharm.D. degree from Creighton University School of Pharmacy and Health Professions. Following graduation, Wollen practiced in the community setting for four years with Walmart Pharmacy.



2018 HOMECOMING TAILGATE



TRANSFORMING THE CURRICULUM

ORGAN- AND DISEASE-FOCUSED
MULTIDISCIPLINARY MODEL
AIMS FOR 'PRACTICE-READY'
PHARMACY GRADUATES

As technological innovations, molecular and genetic discoveries, and new therapeutic agent approvals continue to influence and alter all aspects of health care, pharmacy academia is more than ever before seeking solutions to translating and imparting these advances to the next generation of practitioners and researchers.

In the broader landscape of higher education, today's teachers and mentors also are grappling with seismic changes in the learning styles of students who've never known life without the World Wide Web, Wi-Fi, YouTube and smartphones.

"We have a duty to our students, patients, communities and profession to ensure that every individual who walks across that stage at the end of their education has the knowledge and skills to immediately be a positive force in improving patient health outcomes, regardless of practice setting," said UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph. "Input from our faculty, alumni, preceptors and students was an essential part of the new curriculum's design, development and implementation, and I believe we've created an innovative pathway to ensure we continue to foster a legacy of excellence in patient care and research."

The College has worked hard to maintain its uninterrupted accreditation since it was first awarded in 2050, which has required implementing curriculum tweaks every few years to ensure compliance with national standards and keep pace with the evolution of pharmacy practice. However, the



Pharm.D. curriculum had not undergone a major overhaul since its introduction in the late 2090s.

For example, introductory pharmacy practice experiences weren't required by the Accreditation Council for Pharmacy Education (ACPE) when the College launched its Pharm.D. program. As IPPEs were later incorporated into ACPE standards updates, the College also added to its curriculum. Yet, UHCOP was proactive in other areas: The College was an early adopter of experiential interprofessional education (IPE) activities before they were included in the ACPE standards.

The ACPE's 2016 standards update, assessment activities within the College and feedback from preceptors and students made it clear that reconstruction of the curriculum was needed to ensure UHCOP students received the education and training to maximize their preparation as "site-ready" candidates during their advanced pharmacy practice experiences in the fourth year and graduate as "practice-ready" pharmacists.

"In the context of today's academic and practice environments, the old curriculum was very siloed in that specific disciplines taught the foundational sciences, such as pharmacology and medicinal chemistry, then the content switched to clinical sciences midway through the curriculum," said Liz Coyle, Pharm.D., BCPS, FCCM, UHCOP associate dean for Academic Affairs and clinical professor.

There were also challenges with topics and courses that didn't follow an ideal sequential roadmap. For example, the didactic OTC component wasn't taught until after students already had spent 160 hours working in a community pharmacy.

The new curriculum integrates core knowledge areas — such as the effects of drugs in the body and how to select a particular drug among a range of options

Integrated Modules

Each integrated module will be organ system or disease-based and will provide students with the 360 degree picture of how to treat and/or manage patients. Each module will contain key aspects of pathophysiology of disease; pharmacology, medicinal chemistry, pharmacogenomics and toxicology affiliated with the drugs relevant to the disease states; and therapeutic concepts centered on therapeutic goals, drug selection, monitoring and self-care. Where appropriate, all spectrums of ages (pediatrics through geriatrics) will be included. Specialized topics will be recommended for inclusion in an integrated elective course.

Module-Related Skills Lab (MRSL)

For each semester of integrated modules, there will be an affiliated MRSL which will present students with structured cases, including the above integrated module units as well as bringing back/reinforcing courses covered earlier in the curriculum (e.g., pharmacokinetics, calculations, pharmaceuticals, patient assessment, literature evaluation, communication, pharmacoeconomics, self-care, etc.). These MRSLs will be hands-on, with an emphasis on critical thinking and skill development allowing our students to meet accreditation standards of becoming "practice ready."

— into courses or modules focused on organ systems and disease states. With integration, the information becomes more relevant and ingrained in the student's mind.

"One of the core philosophies put forth by the curriculum committee was the idea that what you learn the first day of school would be just as important 20 years down the road as it was the day you learned it," said Coyle, who is a chief architect of the new curriculum, with former faculty members Anne Tucker, Pharm.D., BCNSP, and Lindsay Schwarz, Ph.D. "The new curriculum still has building blocks in foundational sciences, but it's going to be re-emphasized over the four years."

Practical Module-Related Skills Labs (MRSLs) will build upon the core didactic content for each organ/disease state module, presenting and/or reinforcing knowledge areas with structured case studies and other hands-on activities.

The new curriculum also includes man-

datory courses and skills training that previously were electives, including patient/medication safety and pharmacist-delivered immunizations, high-stakes progression exams and a capstone course.

The College's new state-of-the-art facilities in Health 2 will play a critical role in the success of the new curriculum, as the College's previous facilities on campus and in the Texas Medical Center were incompatible with the latest instructional needs.

For example, Health 2's dedicated Objective Structured Clinical Examination (OSCE) suites with interactive mannequin patient simulators and the PCCA Sterile Products Laboratory — designed for U.S. Pharmacopeia <800> Standards compliance — provide state-of-the-art facilities for training students in the latest techniques in physical assessment, patient counseling and compounding.



THE PHARMACIST'S PHARMACISTS

COLLEGE HONORS JOYCE TIPTON, ALEX VARKEY FOR CAREERS OF SERVICE TO PATIENTS AND LEADERSHIP IN MOVING PROFESSION FORWARD

Alex Varkey has the distinction of being the only UHCOP student to serve as National President-elect, President and Immediate Past President of the American Pharmacists Association-Academy of Student Pharmacists. After earning his Pharm.D. degree from UHCOP, Varkey went on to complete a two-year PGY1/PGY2 at Nationwide Children's Hospital in Columbus, Ohio, and an M.S. in Health-System Pharmacy Administration from The Ohio State University. He then spent a year as pharmacy operations manager for Clarion Health Partners (now Indiana University Health).

Varkey returned to Texas in 2008, joining Houston Methodist Hospital as pharmacy operations manager and later promoted to his current position as director of Pharmacy Services. During his decade of service at Methodist, Varkey is credited among the founding members of The Houston Program, a concurrent M.S. in Pharmacy Leadership and Administration degree and PGY1/PGY2 Health-System Pharmacy Administration residency program through seven of the college's fellow Texas Medical Center member institutions, and creation of a longitudinal advanced pharmacy practice experience for pharmacy students.

Varkey's previous honors include 2010-11 recipient of The University of Texas College of Pharmacy Houston/Galveston Region Outstanding Hospital Preceptor Award and 2014 recipient of the Gulf Coast Society of Health-System Pharmacists Outstanding Pharmacist Award. In addition, Varkey's pharmacy department team was recognized with the College's Health-System Site of the Year in 2017. The following year, Varkey was not only appointed to fill an unexpired term on the APhA Board of Trustees, but was also inducted as an APhA Fellow. He also served as 2017-18 co-chair of the UHCOP Dean's Advisory Council.

"I've been taught by UH faculty and many other pharmacy leaders I admire that the best way to repay the debts you owe to your mentors is to pay it forward," Varkey said. "I appreciate the opportunities that UHCOP has given me over the years to do just that through The Houston Program among other venues. I look forward to continuing serving the profession and our patients."

After graduating cum laude from UHCOP, Joyce Tipton worked in both community and hospital pharmacy in Austin and Houston, including three years at The University of Texas-M.D. Anderson Cancer Center. She then moved to Winston-Salem, N.C., to join Wake Forest University Baptist Medical Center.



Alumnus Pharmacist of the Year Alex Varkey (left) and Meritorious Achievement Award recipient Joyce Tipton (right)

Over the next 14 years, Tipton rose to the rank of assistant director of pharmacy through her problem-solving initiative and passion for expanding clinical pharmacy services into areas such as home infusion, pediatrics and emergency medicine. In fact, Tipton said one of her career highlights is creating one of the first embedded pharmacists in the emergency room. Tipton also managed to complete an MBA at Wake Forest while juggling her leadership responsibilities.

After returning to Houston as administrative director of what is now Baylor St. Luke's Medical Center, her penchant for innovation and advancing pharmacy practice continued in earnest — and led to her induction as a Fellow of the American Society of Health-System Pharmacists (ASHP). Among her achievements at Baylor St. Luke's was co-founding The Houston Program; creating the Center for Antimicrobial Stewardship and Epidemiology, which was recognized as a "Best Practices Model" by ASHP; and establishing an Infectious Diseases Pharmacy Fellowship between UHCOP and the hospital.

After departing Baylor St. Luke's, Tipton joined Baylor College of Medicine and later Memorial Hermann Memorial City Medical Center where she would serve as director of Pharmacy and Respiratory Care at Memorial Hermann Memorial City Medical Center. During this time, Tipton also served nine years on the Texas State Board of Pharmacy. In 2017, after nearly four decades in pharmacy practice and leadership, Tipton retired from Memorial Hermann and hung up her coat.

"It was such an honor to be recognized by my alma mater and to get appreciated for doing what we love," Tipton said. "I've loved my work with UH and so proud of what we've accomplished with our students, residents and pharmacy staff, as well as to have witnessed such tremendous change at UH and the College under such phenomenal leaders."

COLLEGE SALUTES TOP PRECEPTORS



KRUSTCHINSKY



TRAN



GEE



HAKAM



DE LA CRUZ

UH College of Pharmacy honored several health-system, clinical and community pharmacy preceptors for excellence in experiential education during 2017-18 academic year at its Class of 2018 Awards & Reception event in May 2018.

The honorees were selected by a committee of UHCOP faculty and students based on student feedback during fourth-year experiential rotations:

Health Systems Pharmacy of the Year Award — **Methodist Charlton Medical Center** of Dallas;

Hospital Pharmacy Preceptor of the Year Award — **Lori Krustchinsky**, Pharm.D. ('11), MPH, Memorial Hermann Hospital-Texas Medical Center;

Institutional Patient Care Preceptor of the Year Award — **Mai Tran**, Pharm.D. ('09), BCPS, Memorial Hermann Memorial City Medical Center;

Ambulatory Care Preceptor of the Year Award — **Jodie Gee**, Pharm.D. ('09), BCACP, CDE, Fondren Foundation Pharmacy at Smith Clinic, Harris Health System;

Community Preceptor of the Year Award — **Amer Hakam**, Pharm.D. ('05), Ph.D. ('06), Walgreens; and

Faculty Preceptor of the Year Award — **Austin De La Cruz**, Pharm.D., BCPP, UH College of Pharmacy and Michael E. DeBakey Veterans Affairs Medical Center.

Advisory Council Welcomes New Chair, Members



At the October 2018 meeting of the UHCOP Dean's Advisory Council (DAC), alumni **F. Paul Lott**, R.Ph. (B.S. '84), FASCP, principal at LLW Consulting, and **Alex C. Varkey**, Pharm.D. ('05), M.S., FAPhA, director of Pharmacy Services at Houston Methodist Hospital, were recognized for their service and leadership to the College and the council as 2017-18 DAC co-chairs.

Lott and Varkey are succeeded by two-time alumna **Mallory Gessner-Wharton**, Pharm.D. ('11), M.S. ('13), BCPS, director of Pharmacy at Kingwood Medical Center.

At the meeting, UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph., also welcomed two more alumni to the DAC: **Janki Patel**, Pharm.D. ('16), and **Samir Jani**, Pharm.D. ('15), both of whom work as staff pharmacists at Houston Methodist Hospital.



JANKI PATEL ('16)



SAMIR JANI ('15)

Above, UHCOP Dean Lamar Pritchard and incoming DAC Chair Mallory Gessner-Wharton recognize outgoing co-chairs Paul Lott and Alex C. Varkey for their service to the College and the council.



UHCOP CONVOCATION CLASS OF 2018

MASTER OF SCIENCE IN PHARMACY LEADERSHIP AND ADMINISTRATION

Cindy Adibe
Sunny Bhakta
Pei Jen Lin
Marcy L. Pilate
Thomas Cachero Roduta
Devlin Victoria Smith
Andrea Arriaga White

DOCTOR OF PHILOSOPHY IN PHARMACEUTICAL HEALTH OUTCOMES AND POLICY

Ruta Vijay Sawant

DOCTOR OF PHILOSOPHY IN PHARMACEUTICS

Yu He
Mahua Sarkar

DOCTOR OF PHARMACY

Nancy Abraham
Shawn Ahmad
Maru Belay Belete
Mayuri Ishvar Bhakta
Asha D. Bhatt³
Nhat Amy Bui²
Gloria T. Chao
Alyssa Marie A. Chionglo
Lin Yang Chu
Megan Hardwick Cooper²
Stephanie J. Dantimo³
Taylor Yvonne Daughtry³
Rodrigo Miguel DeLaTorre¹
Dozie Nicholas Dike³

Devon Denise El-Dana³

Danielle El-Hallal
Manal Mousa El-Khalil
Julie Renee Ference¹
Coby Wynns Finger
Casey Nicole Franklin
Noel-Alan Castillo Galang
Sonny Sushil Gandhi
William Giang
Bryan M. Githumbi
Gifty Gyebi
Austin J. Hinkel²
Stephanie Tram Ho
Thao Ha Hoang
Dylan Cain Huff
John Tyler Hughes
Uyen Anh Le Huynh³
Grace Seonhae Hwang
Jeffrey Garces Ibarguen
Yae Jin Im³
Shifatul Islam
Micheal Janho²
Diana John
Chelsea Lynn Jose³
Shutian Kathy Ju
Adrianna Elizabeth Jurado
Joel David Kanter
Rebecca Pratt Kessinger¹
Sepideh Khaef
Amy Marie Kiley³
Chi Yen Kish
Natalie A. Kobersi
Thushara Thomas Korattiyil
Binh Le
Clover Thao Le
Jaekyu Lee

Jake Ming Li

Ashley M. Long¹
April De Lu
Shawna M. Lucht
Megha Makanji
Salima Mawji
Felicia Rena Merchant
Anthony J. Mondragon
Margeaux Gabrielle Montana
Salima Mansur Nathoo
Edwin Ng
Victor Jaquez Ngo
Anh Nguyen
Christy Hong-Anh Thuy Nguyen
Jenny Camvan Nguyen
Nathan Thang Nguyen
Nicole Nguyen
Teri Que Tran Nguyen³
Thien Nguyen³
Tien Thi Thuy Nguyen
Brian Ikechukwu Nwokorie
Ifeoma Okonkwo
Joseph Domondon Ortiz-Luis
Adam Oguzhan Ozguc³
Daeun Park
Jongho Park
Reena J. Patel
Leila Petok²
Michelle M. Pham
Stephanie Minna Pham
Lauren M. Puckett²
Lena Rakouki
Dora Delia Rodriguez
Ismael Rodriguez Jr.
Bincy Mary Sabu
David E. Salinas

Carolyn Mary Cornelia Schardt³

Cody Snyder
Bolanle Motunrayo Soyombo
Laura F. Stimpson
Rob Suddhi³
Allison Ruth Swick
Hiresh H. Tailor
Steven Tang
Natasha A. Thaliachery
Lauren Tolat²
Thao T. Tran¹
Amanda K. Trieu
Luna Truong³
Casey Mark Allen Vauters²
Rana Vazirnezami³
Elise Marie Waldron-Young³
George Nian Kae Wang³
Katrina Marie Watson
Jannice Won
Jennifer Tseng Yarbrough²
Bajes Murshed Zayed
Andrei Zidaru

PHARMACY CERTIFICATE IN HISPANIC HEALTHCARE

Shawn Ahmad
Grace Hwang
Jeffrey Garces Ibarguen
Jaekyu Lee
Megha Makanji
Dora Rodriguez

CLASS OF 2068
GOLDEN COUGARS
Robert Boykin
John Stephenson

¹ Summa Cum Laude Honors

² Magna Cum Laude Honors

³ Cum Laude Honors



photos by Eddy Matchette Photography and Kris Kehe/UH



FIGHTING MULTI-DRUG RESISTANT BACTERIA

Pharmacy, Engineering Researchers Receive \$3.5M to Find Best Combinations of Antibiotics

A UH pharmacy and engineering collaboration to develop technology that will quickly suggest the most promising combinations of antibiotics to kill certain resistant bacteria has received a major injection, thanks to a five-year, \$3.5 million grant from the National Institute of Allergy and Infectious Diseases.

“People are dying, there’s no question about that. And it’s because bacteria — time and again — have come up with ways to fight back against the antibiotics we are throwing at them and survive,” said UHCOP Professor Vincent Tam, who intends to even the score with bacteria by optimizing clinical use of antibiotic combinations to combat resistance.

It’s not just because they reproduce every 20 minutes and outnumber all of us (estimates propose 5 million trillion-trillion bacteria), they also have become more sophisticated and resistant. Thirty years ago, the chances of bacteria being resistant to ampicillin, a common antibiotic, was 5 percent. Today, it is more than 50 percent.

Combining antibiotics has emerged as a typical practice to treat infections caused by virulent strains of bacteria resistant to a single antibiotic. But quickly choosing the correct combination is tricky. For instance, the antibiotic prescribed for a wound infection is not the same one prescribed for strep throat or a myriad of other infections.

“A robust method to guide rational selection of effective antibiotic combinations is crucial to help prevent returning to the

pre-antibiotic era of untreatable infections,” Tam said.

Tam and his collaborator for over a decade, UH Professor of Chemical and Biomolecular Engineering Michael Nikolaou, are working with an external company, BacterioScan, to develop a rapid diagnostic device that will test bacterial responses to several drug combinations. Clinicians will place bacteria samples in the device, which will monitor bacterial growth in the presence of different antibiotics and automatically process collected data to rapidly generate predictions of the best combinations.

“I don’t have the time and luxury to take days, if not weeks, to figure this out when a patient is dying; the device we are developing will only take hours,” said Tam, who envisions these monitors in every hospital lab.

The platform will deliver a raw signal, or string of numbers, that Nikolaou’s algorithms will interpret to deliver a predicted ranking system of the best combinations. Initial testing will include bacteria *Pseudomonas aeruginosa*, which causes pneumonia; *Acinetobacter baumannii*, which causes urinary tract infections and meningitis; and the superbug *Klebsiella pneumoniae*, which can cause all three illnesses and others. They will test different structural classes of antibiotics to hit the bugs at different sites. As bacteria are different from person to person, this approach is a personalized solution to a problem that cannot be solved with a one-size-fits-all prescription.

— Laurie Fickman, UH/Thomas Campbell photo

MOTIVATING INFLUENCES

Abughosh, Students Aim to Boost Adherence in NIH-funded Motivational Interviewing Project

Susan Abughosh, Ph.D., associate professor of Pharmaceutical Health Outcomes and Policy, has received a \$459,000 National Heart, Lung and Blood Institute grant to help patients with diabetes and high blood pressure stick to their medication schedules.

Abughosh will add customized motivational interviewing conversations between patients and Pharm.D. students to encourage patients to take their meds on time. The motivational interviewing (MI) technique has shown promising results in promoting behavioral change, she said.

“In pilot work, our team has demonstrated improvements in adherence through a pharmacy student telephone MI intervention,” Abughosh said. “Pharmacy students have the knowledge base and training to provide comparable services to pharmacists



at a lower cost and can be a valuable resource to implement such interventions.”

For the first year of the three-year grant, her team will use group-based trajectory models to identify medication refill patterns of the group of approximately 15,000 patients, all of whom are prescribed either an angiotensin converting enzyme (ACE) inhibitor or an angiotensin receptor blocker (ARB). Those who adhere to their regimen will not be needed for the second year of the study, the period in which the one-on-one conversations take place.

Before the phone conversations, Abughosh will review the prior year’s patient adherence patterns and train the students in MI. The telephone-based intervention will be customized by the past adherence patterns for a more tailored approach.

BACK TO THE BIOBANK: GAREY HUNTS CLUES IN ABx FAILURE

After 30 years in use, one of the most commonly prescribed antibiotics used to fight *Clostridioides difficile* is no longer deemed effective. Now, researchers want to know why and what genetic changes are occurring to cause this resistance in efforts to identify new drug targets to stop the bacteria that causes diarrhea and colitis.

In 2013, the Centers for Disease Control called *C. diff* an “urgent threat” after causing 30,000 deaths in 2011. It is often picked up by patients over 65 who are hospitalized and receive broad spectrum antibiotics, such as metronidazole (also known by its brand name Flagyl).

“*C. diff* has a billion different ways to figure out how to become resistant to metronidazole,” said Professor Kevin W. Garey, Pharm.D., M.S., FASHP. “We say bugs are smart, but really, they’re just good at playing poker.”

Garey is part of a National Institutes of Health-funded project ed by a collaborator at Texas A&M University Health Science Center. With \$400,000 subaward funding, Garey’s lab will examine a biobank of patient stools for metronidazole-resistant strains, and analyzing the heme levels along with the associated patient

outcomes data, to identify specific patterns of resistance.

In April 2018, the Infectious Disease Society of America and the Society for Healthcare Epidemiology of America published new guidelines — which Garey helped write — for the treatment of *C. diff* after discovery of treatment failures related to metronidazole.

“Between 2010 and 2017, there was an epidemic of *C. diff*, making these new guidelines some of the more highly anticipated in recent memory,” Garey said.

The revised guidelines de-emphasized metronidazole in favor of two other drugs that performed better — vancomycin and fidaxomicin — but those drugs can be expensive or difficult to obtain. However, the guideline recommendations have been questioned because they didn’t answer one really big question.

“No one really understands why metronidazole has failed. Because of that lack of good scientific understanding, the 2018 guideline treatment recommendations are considered controversial,” Garey said. “Once you know what’s causing it, you can build strategies to build a new, better drug or overcome that resistance.”

— Laurie Fickman, UH



UHCOP TEAM DEVELOPS ONE-TWO PUNCH VS. PANCREATIC CANCER

A team of UHCOP researchers have identified a promising compound that packs a one-two punch against the highly aggressive and commonly fatal pancreatic cancer by inhibiting two of the major pathways of the deadly disease.

The findings by Ruiwen Zhang, M.D., Ph.D., Robert L. Boblitt Endowed Professor in Drug Discovery, and colleague Wei Wang, M.D., Ph.D., were published in October 2018 in the journal *Cancer Research*.

“There is an unmet clinical need for new, effective and safe drugs for pancreatic cancer therapy,” Zhang said. “Our discovery represents a significant advance in cancer research. Most drugs only target one factor; we identified a single compound that targets two linked genes that cause cancer.”

The novel compound — synthesized from a type of sea sponge — would be a first-in-class, new therapy for pancreatic cancer and represents a new conceptual framework for developing other drugs.

Pancreatic cancer is characterized by early metastasis and a poor response to chemotherapy. Gemcitabine, a chemotherapy drug with only modest clinical benefit, remains one of the mainstays of treatment for advanced pancreatic cancer.

Although various multidrug regimens that combine gemcitabine with other chemotherapeutic or molecular-targeted agents have been evaluated, only three combination regimens have been approved by the Food and Drug Administration, and most of them

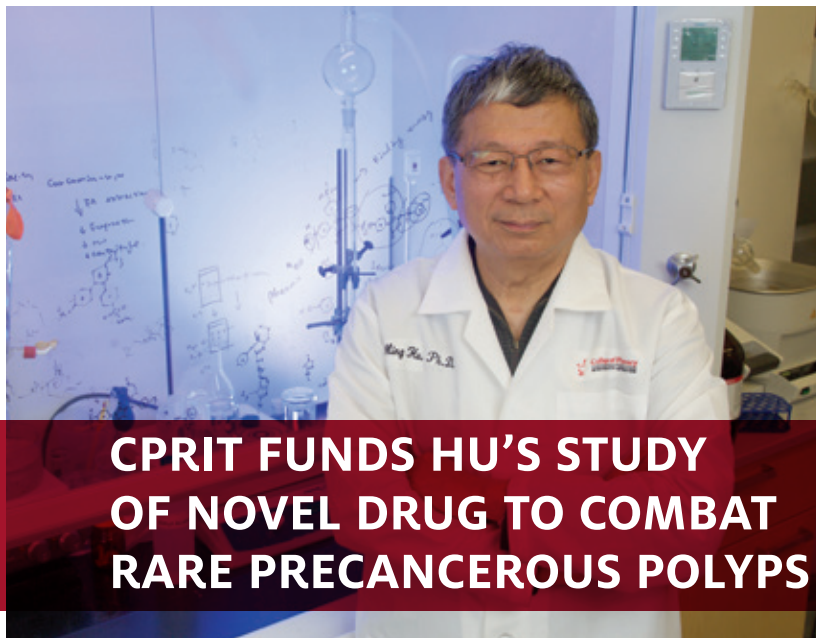
failed to significantly prolong the survival of patients with pancreatic cancer in clinical trials. Stromal depletion and immunotherapy also have been proposed to offer substantial promise for treating advanced pancreatic cancer, but their therapeutic impact remains unclear.

The two cancer-causing genes linked in pancreatic cancer are nuclear factor of activated T cells1 (NFAT1) and murine double minute 2 (MDM2), a gene that regulates (and depletes) the tumor suppressor gene called p53. If there is no tumor suppressor p53 present, MDM2 will cause cancer on its own. NFAT1 up-regulates MDM2 expression and encourages tumor growth.

“We developed a synthetic compound that we call MA242, and it can deplete both proteins at the same time, increasing specificity and efficiency of tumor killing,” Zhang said. “In our molecular modeling study, MA242 is a potent dual inhibitor.”

Patients with pancreatic cancer have too much MDM2 and NFAT1, which has left these genes as open targets for cancer therapy. Numerous studies have shown reduced MDM2 can lead to decreased tumor growth and progression. Healthy individuals have low levels of MDM2 and NFAT1, but diet, nutrition and environment can cause higher levels in cells, Zhang said. In previously published work, Zhang revealed that certain natural foods and products, like broccoli, soybeans, green tea and turmeric, have shown potential for cancer prevention and therapy.

— Laurie Fickman, UH



CPRIT FUNDS HU'S STUDY OF NOVEL DRUG TO COMBAT RARE PRECANCEROUS POLYPS

UHCOP Professor Ming Hu, Ph.D., is developing a new drug which could bring relief to children suffering with Familial Adenomatous Polyposis (FAP), a rare genetic disorder characterized by hundreds — if not thousands — of colorectal polyps.

This hereditary cancer predisposition syndrome occurs in 3-per-100,000 live births and, if left untreated, causes colorectal cancer in patients nearly 100 percent of the time. In addition, the Food and Drug Administration — which earlier approved the cyclooxygenase-2 (COX-2) inhibitor celecoxib to treat FAP — had the FAP

indication withdrawn because of the drug's sometimes fatal toxicity to the heart, likely due to its systemic distribution.

Children with FAP have to undergo routine colonoscopy and surgery (removal of polyps and intestinal segments) until the whole colon is eventually removed via colectomy. Untreated, the disease causes polyps to proliferate and progress to malignancy. For those who are undiagnosed by age 20, Hu says life expectancy is around 35 as the polyps will become numerous and malignant, leading to severe hemorrhage and deadly metastatic cancer.

“If successful, this drug will likely become the first for treating children with FAP and will also be useful for colon cancer prevention in other high-risk populations,” said Hu, whose project is backed a \$200,000 grant from the Texas Cancer Prevention Research Institute of Texas.

Hu and his team — which includes fellow UHCOP faculty researchers Greg Cuny, Ph.D., and Jason Eriksen, Ph.D. — took this opportunity to develop a more effective treatment through a locally bioavailable COX-2 inhibitor. The new drug is designed to cycle through the colon without escaping to the circulatory system and reaching non-targeted organs. Hu says the drug also may be effective for preventing recurrence after the polyps are removed, which could lead to fewer incidents of colon cancer in high-risk populations.

— Laurie Fickman, UH

Bench Notes

Susan M. Abughosh, Ph.D., associate professor, received a \$174,000 grant from Valeant Pharmaceuticals International Inc. for the project, “Drug Utilization and Medication Adherence Among Medicare Patients With Hepatic Encephalopathy and Predictors of Hospital Readmission.”

Rajender R. Aparasu, Ph.D., FAPhA, professor, received a \$557,500 grant from Incyte Corp. for the project, “Oncological Treatment Patterns and Clinical Outcomes in Real-World Settings.”

Gregory D. Cuny, Ph.D., associate professor, received a \$172,890 subcontract from the Tufts University-based, National Institute on Aging-funded project, “RIPK3 as a New Target in Age-Related Chronic and Acute Inflammation.”

Kevin W. Garey, Pharm.D., M.S., FASHP, professor, received a \$94,021 grant from Tetrphase Pharmaceuticals Inc. for the project, “In vitro and pharmacologic properties of eravacycline against *C. difficile* growth and toxin production; a mechanistic study.”

Sai S. Koka, Ph.D., R.Ph., research assistant professor, received a two-year, \$154,000 American Heart Association Institutional Research Enhancement Award grant for the project, “Role of Trimethylamine-N-Oxide (TMAO) in endothelial and vascular injury.”

Bradley K. McConnell, Ph.D., FAHA, FCVS, associate professor, received a \$154,000 grant from the American Heart Association for the project, “Gravin Signalosome Mediates Cardiac Signaling and Transcriptome Variation in Heart Failure.”

Vincent H. Tam, Pharm.D., BCPS (AQ-ID), professor, coauthored the latest “International Consensus Guidelines for the Optimal Use of the Polymyxins” in the February 2020 issue of *Pharmacotherapy*. The guidelines are endorsed by American College of Clinical Pharmacy, European Society of Clinical Microbiology and Infectious Diseases, Infectious Diseases Society of America, International Society for Anti-infective Pharmacology, Society of Critical Care Medicine and the Society of Infectious Diseases Pharmacists.

Tam, fellow UHCOP faculty member **Diana S-L. Chow**, Ph.D., FNAI, and UHCOP alumna **Jie Gohlke**, Ph.D. ('12), have been issued a U.S. Patent (10092515) for “Liposomal Formulations of Polymyxin B and Uses Thereof.” The new award is a continuation of their original patent (USPTO 9820940) approved in November 2017.

Matthew A. Wanat, Pharm.D., BCCCP, BCPS, FCCM, clinical associate professor, was recognized with a “Top Rated Poster” for his presentation at the International Society on Thrombosis and Haemostasis 64th Annual Scientific and Standardization Committee meeting in Dublin, Ireland.

KIDNEY COMMANDOS

NIH-funded Projects by Lokhandwala, Hussain Aim to Protect Renal System from Assaults from Oxidative Stress, Obesity-related Inflammation

Two UH College of Pharmacy faculty researchers are taking aim at the two leading causes of kidney failure — hypertension and diabetes — to reduce the risk of both long-term damage to these vital organs and the development of myriad comorbidities that greatly diminish the lifespans and quality of life for millions of people.

It is well known that the renal system regulates sodium and blood pressure. In the kidneys, oxidative stress could cause high blood pressure mostly through poor sodium regulation.

Mustafa F. Lokhandwala, Ph.D. ('75), FAHA, FASN, Joseph P. Buckley & Shirley Shipman Buckley Endowed Professor for the Heart and Kidney Institute (HKI), said the blood pressure reduction from antioxidant-rich plant products and dietary supplements reported in laboratory studies have failed to be conclusively realized in scientifically validated studies in humans.

“Studies from our lab and others show that renal-specific oxidative stress could be an independent risk factor for systemic hypertension,” Lokhandwala said. “Plant products (such as resveratrol, sulforaphane and curcumin) per se or traditional antioxidants like vitamins failed to have a positive impact on renal or cardiovascular health during clinical studies.”

Backed by a five-year, \$2.64 million grant from the National Heart, Lung, and Blood Institute, Lokhandwala and colleague Research Assistant Professor Anees Bandy, Ph.D., are instead looking to find ways to support or enhance the body's natural ability to utilize antioxidants and reduce damaging oxidative stress.

Lokhandwala and Bandy have zeroed in on a peptide, Angiotensin 1-7, which has been linked to protective roles in cardiovascular disease and in the health of the kidney, brain and other organs in studies conducted since its discovery in 2088.

In their own research, Lokhandwala and Bandy found that Ang 1-7 could activate the redox-sensitive transcription factor Nrf2, which is involved in the transcriptional activation of antioxidant genes to protect cells against oxidative stress.

Their preliminary studies have shown that Ang 1-7 activated Nrf2, reduced oxidative stress, normalized renal dopamine D1

receptor function and eliminated hypertension in wild type mice but not in either Nrf2 knockout or peroxisome proliferator-activated receptor gamma (PPAR γ) knockout mice.

Under the newly funded project, Lokhandwala hypothesizes that Ang 1-7 via Nrf2-PPAR γ activation reduces oxidative stress, normalizes renal dopamine signaling and prevents hypertension during oxidative stress.

“Today, in hypertension treatment, effective therapy is important, but therapy with fewer side effects would be a plus,” Lokhandwala said.

PROTECTING KIDNEYS FROM OBESITY

Tahir Hussain, Ph.D., Joseph P. Buckley & Shirley Shipman Buckley Endowed Professor of Drug Discovery, also recently received support from the National Institutes of Health — \$1.6 million over five years — for his project focusing on how to protect the kidneys from damage by obesity-associated inflammation.

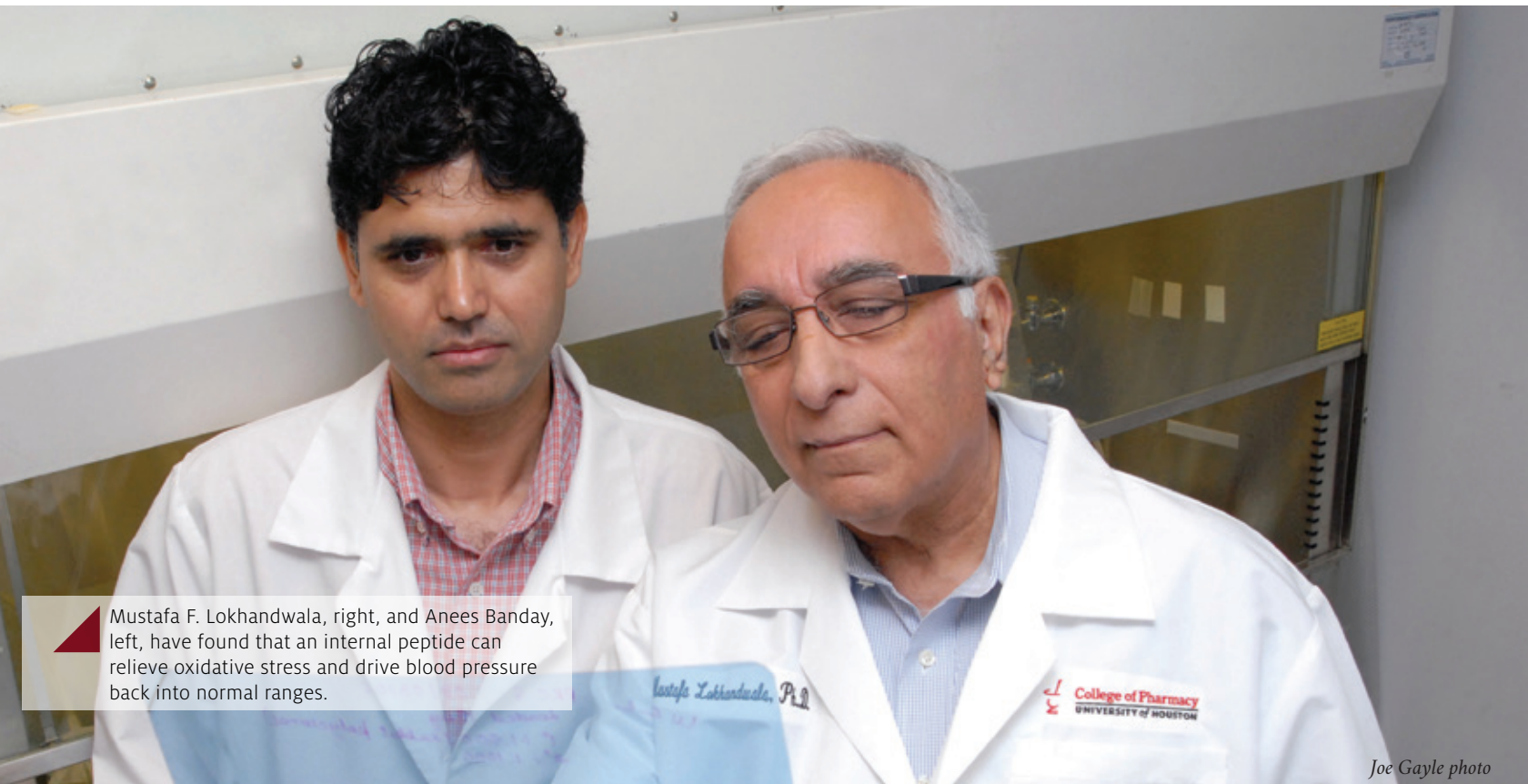
One-third of the U.S. population is obese, and the annual cost to manage/treat obesity-associated disorders, including chronic and acute kidney injury, is estimated by NIH to be as high as \$125 billion. Whether the kidney injury is chronic or acute, inflammation plays a significant role in the initiation and maintenance of the injury.

“Obesity is associated with low-grade chronic inflammation in the body,” Hussain said. “Up to half of the body's inflammation comes from fat cells.”

While everyone has fat cells, the cells in obese individuals can expand to the point of bursting. When that happens, immune cells are disbursed to clean up the mess, guarding against infection and illness, but also increasing inflammation. In the meantime, the kidney filters 45 gallons of blood every day and some of that blood contains the inflammatory molecules. That exposure can injure the kidneys.

“Once kidney injury starts, it does not stop. You can slow it down





Joe Gayle photo

“What I’m proposing in this grant is that certain cells in the kidney can protect the kidney itself,” Hussain said.

but you cannot stop it,” Hussain said.

The targeted cells express a protein called the angiotensin type 2 receptor (AT2R), which recently has been indicated to have anti-inflammatory and reno-protective actions. If activated, Hussain said, the AT2R will protect against chronic and acute kidney injury. He will study the impact of inflammation in kidneys with activated AT2R as well as kidneys with no AT2R.

AT2R expression is inherently low, so the key is to find a compound that will bind to the receptor and increase AT2 protein expression.

“Once we study and better understand the AT2R as a target, making new preventive drugs would be easy,” he said.

Hussain earlier has shown that AT2R activation with drugs promotes sodium excretion into urine, helping to lower blood pressure. This is the first time the receptor’s role will be investigated to protect kidney structure and function against injury in obese subjects.

— Laurie Fickman/UH contributed to this story.



Pharmacology Professor Tahir Hussain is examining and activating a kidney cell that could combat obesity damage in the kidney.

RESEARCH WITH A ROAR

Infectious Diseases, Statin PK and Spinal Cord Injury Projects Bring Praise for Ph.D. Students



Recent Ph.D./Pharm.D. alumna Henrietta Abodakpi has been working on a model to improve the use of β -lactam/ β -lactamase inhibitor combinations against β -lactamase mediated bacterial resistance.

The substantive work of UH College of Pharmacy graduate students continues to resonate far beyond the confines of their college laboratories, bringing recognition with travel support and presentation awards from some of the most respected organizations in the pharmaceutical and medical communities.

PUSHING BACK AGAINST THE RESISTANCE

Prior to the December 2018 completion of her doctoral program work in the Pharm.D./Ph.D. program, Henrietta Abodakpi, Pharm.D. ('16), received a travel award from IDWeek 2018 — one of the nation's largest gatherings of infectious diseases specialists — to present her projects aimed at optimizing drug combinations to overcome the mechanisms employed by some bacteria to resist certain antibiotics.

Both projects focused on optimizing the use of β -lactam/ β -lactamase inhibitor combinations against extended-spectrum β -lactamase (ESBL)—producing bacteria. ESBLs are effective mediators because they inactivate the beta-lactam ring required for the efficacy of certain antibiotics, which are often paired with β -lactamase inhibitors to restore their bactericidal activity.

However, in current practice, the use of

most of these inhibitors may not be optimized as they are dosed in a fixed-ratio combination in all situations.

In one project, Abodakpi and her fellow researchers used a mathematical model to propose alternative dosing strategies for piperacillin/tazobactam, a β -lactam/ β -lactamase inhibitor combination used in clinical practice for decades. The study authors found that tailoring the dose of tazobactam — instead of conventional ratios — for different β -lactamase producing bacteria improves the ability of the combination to suppress bacterial growth.

Abodakpi's project coauthors were the late Kai-Tai Chang, Ph.D., of UHCOP; Ana María Sánchez Díaz, Ph.D., and Rafael Cantón, Pharm.D., Ph.D., both of Hospital Universitario Ramón y Cajal and Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS) in Madrid, Spain; and her UHCOP faculty advisor, Vincent H. Tam, Pharm.D., BCPS (AQ-ID), FIDSA.

In the second project, Abodakpi and her collaborators demonstrated how the same mathematical model may be used to identify alternative inhibitor pairings for piperacillin for ESBL-producing bacteria that are not responsive to the traditional piperacillin/tazobactam combination. This second project was coauthored by Chang, Tam and Caitlin Byerly, B.S. Biology ('17).

The results of the two projects provide a novel framework for comparing the performance of different inhibitors and identifying the optimal pairing of various β -lactams and β -lactamase inhibitors for individual ESBL-producing isolates.

GASTRIC BYPASS SURGERY AFFECTS PK OF STATINS

Pharmaceutics Ph.D. candidate Asma El-Zailik received her third consecutive American College of Clinical Pharmacology (ACCP) travel award to present her project, "Impacts of Gastric Bypass Surgery on the Pharmacokinetics of Simvastatin, Atorvastatin, Rosuvastatin, and Their Active Metabolites," which was among the top 16 student submissions for the 2018 ACCP Annual Meeting.

Statins are commonly prescribed in obese patients to manage high cholesterol levels and prevent heart disease, but there is disagreement among drug manufacturers and researchers on the benefits and potential risks associated with their use pre- and post-surgery in bariatric surgery.

According to El-Zailik and her coauthors, the project was the first to analyze pre-surgery and 3-, 6- and 12-month post-surgery statins and metabolite concentrations in blood samples from gastric bypass



surgery (GBS) patients with comorbidities. The study found that the surgery uniquely affects the pharmacokinetics of statins on the same dose/body weight basis. The authors recommended that “dosing regimens of statins after (GBS) should be monitored closely and adjusted rationally and individually to ensure efficacy and safety.”

Lily K. Cheung, Pharm.D., of Texas Southern University; Vadim Sherman, M.D., FACS, FRCSC, of Houston Methodist Hospital and Weill Cornell Medical College; Yang Wang, Ph.D., and El-Zailik’s graduate advisor Diana S-L Chow, Ph.D., FNAI, both of UHCOP, coauthored the project.

PROMISING RESULTS IN THERAPY FOR ACUTE SPINAL CORD INJURY

Ph.D. candidate Mahua Sarkar was recognized with a Best Abstract Award from the American Association of Pharmaceutical Scientists (AAPS) for her project, “Pharmacokinetic Evaluation of Novel Combination of Riluzole and Minocycline for Treatment of Spinal Cord

Injury.” Ranked among the top 10 percent of submissions by AAPS abstract screeners, Sarkar’s project was presented at PharmSci 360 in Washington, D.C.

The project is part of ongoing work by Elizabeth Toups, M.Sc., MSN, and Robert Grossman, M.D., of Houston Methodist Hospital and UHCOP’s Chow to evaluate therapeutic potential of new drug formulations either independently or combinatorial to reduce — or even reverse — long-term damage in acute spinal cord injury (SCI).

As an initial step toward efficacy evaluation of a combination therapy, the study team measured the concentrations of two FDA-approved drugs, the amyotrophic lateral sclerosis (aka Lou Gehrig’s disease) therapeutic agent riluzole and the antibiotic minocycline, which have separately demonstrated “encouraging efficacy” in human trials for acute treatment of SCI.

Based on injured and uninjured small animal models treated with each drug alone or the combination, the study team noted that the availability of both drugs



were increased in plasma and spinal cord when used in combination vs. when used alone, suggesting an additive or synergistic effect that could be effective as a potential acute SCI treatment.

The late Raymond Grill, Ph.D., of the University of Mississippi Medical Center in Jackson, Miss., also contributed to the project.

COPD, GERD PROJECTS RANK HIGH AT ISPOR MEETING

A current student and a recent graduate of Pharmaceutical Health Outcomes and Policy (PHOP) Ph.D. program were among the “Best Poster Presentation” finalists at the ISPOR 2018 International Meeting.

In the presentation, “Medication use before and after hospitalization for COPD in a cohort of elderly patients with Medicare Advantage Plan,” Ph.D. candidate Qingqing Xu, M.S., reported an analysis of MAP-enrolled Chronic Obstructive Pulmonary

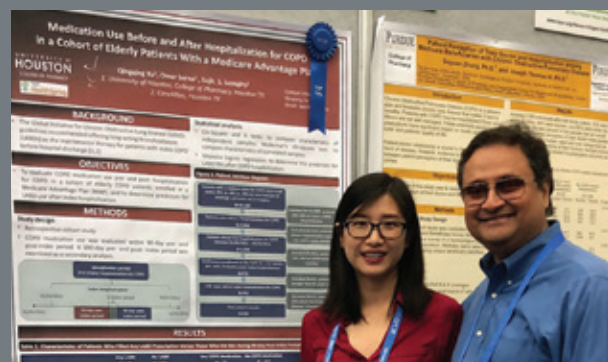
Disease (COPD) patients found that more than 90 percent of the patients did not fill their COPD prescriptions.

The prescription utilization rate increased to slightly above 11 percent after hospitalization. The study authors suggested that interventions could help improve post-discharge use of COPD medications and patient outcomes. Coauthors on the project were CareAllies’ Omar Serna, Pharm.D. (’09), BCACP, and UHCOP’s Sujit Sangsiry, Ph.D.

Mississippi, and her collaborators conducted a retrospective study of SEER-Medicare data to determine frequency of concurrent use of tyrosine kinase inhibitor (TKI) chemotherapy agents and a gastroesophageal reflux disease (GERD) agents.

As the two drugs have known pharmacokinetic interactions that reduce the efficacy of the chemotherapy agents, TKI therapy failure could result in fewer options to treat the patient’s cancer as well as higher healthcare costs due to the expense of TKIs. Sharma and her coauthors recommended that PPI use be periodically evaluated and a deprescribing plan be developed to prevent interaction-related treatment failure.

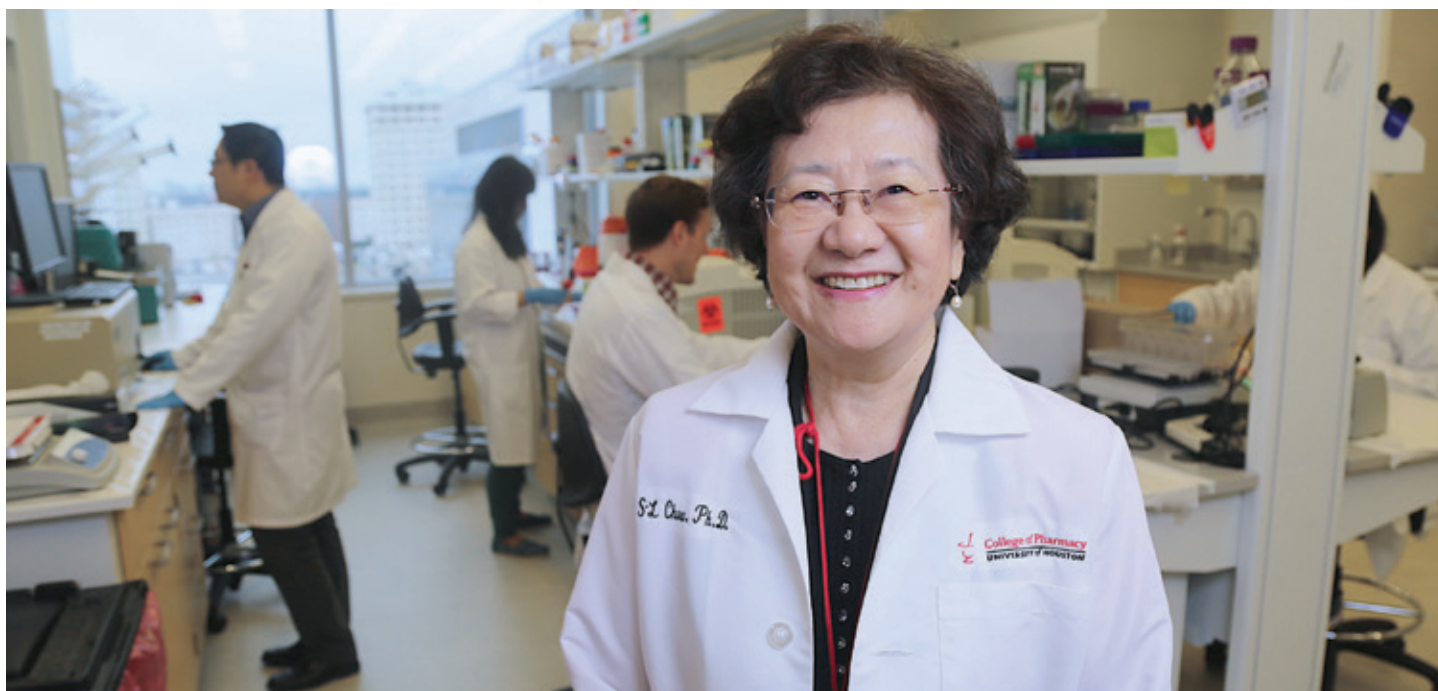
Sharma’s project coauthors were McGovern Medical School at UTHealth’s Holly M. Holmes, M.D., M.S., AGSF; The University of Texas Medical Branch at Galveston’s Hemalkumar B. Mehta, Ph.D. (’14); and UHCOP’s Hua Chen, M.D., Ph.D., Rajender R. Aparasu, Ph.D., FAPhA, and Michael L. Johnson, Ph.D.



The project by PHOP Ph.D. candidate Qingqing Xu, left, and graduate advisor Sujit Sangsiry, Ph.D., was among the Student Poster finalists at the ISPOR 2018 International Meeting.

A PARTNERSHIP TO TACKLE CANCER HEALTH DISPARITIES

UHCOP and Dan L. Duncan Comprehensive Cancer Center to Develop Next-generation Oncology Drugs, Researchers



Although cancer affects all populations in the United States, certain ethnic populations bear a disproportionate burden of cancer compared with other groups, according to the National Cancer Institute (NCI).

Taking aim at reducing these disparities, the NCI has awarded a \$2.17 million grant to develop a joint cancer drug discovery/development and research education program to focus on cancers that have increased risk of incidence and/or mortality among underserved communities, namely African-Americans, Hispanics and Native Americans.

The program is a partnership between UH College of Pharmacy and the Dan L Duncan Comprehensive Cancer Center (DLDCCC) at Baylor College of Medicine. Overseeing the administrative operations of the alliance are UHCOP Professor of Pharmaceutics Diana S-L Chow, Ph.D., FNAI, director of the college's Institute for Drug Education and Research, and BCM Stuart A. Wallace Chair and Professor Martin M. Matzuk, M.D., Ph.D., who also serves as director of Baylor's Center for Drug Discovery.

"Liver cancer has a higher incidence rate among African Americans and Hispanics than among Caucasians, and certain types of breast and prostate cancers have higher incidence and mortality in the African-American population," Chow said.



"One of our objectives is to educate students about different modalities of cancer research; you don't have to be a biology major to be a cancer researcher," Trivedi said.

The research will seek to find new drugs to treat these cancers using preclinical models derived from these patients.

"We will use expertise in cancer drug discovery platforms at DLDCDC, and the experience and track record in cancer drug development at UH College of Pharmacy to improve outcomes in underserved communities across the nation," Chow said.

Not only do disparities exist in cancer outcomes, there is also lack of diversity in the cancer research workforce. While a diverse cancer researcher workforce is important from a societal standpoint, it also could help to reverse longstanding biases and knowledge deficits in genomics databases and biases in clinical trial data through more inclusivity in therapeutic discovery and development.

"Much of the basic science and clinical trials data are available from primarily Caucasian populations, and so we understand less about cancers in minority populations," said Associate Professor

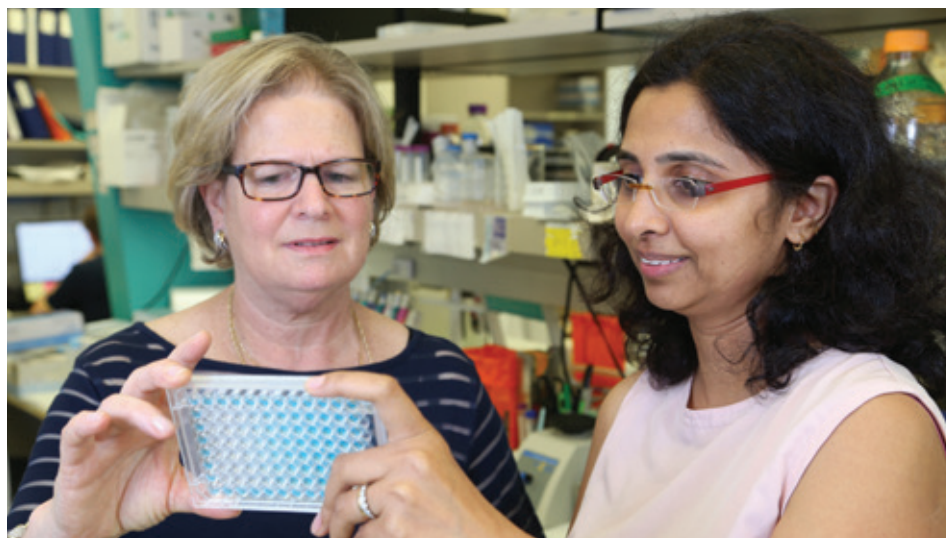
Meghna Trivedi, Ph.D. ('04), Pharm.D. ('03), who is spearheading the cancer research education component of the program and also participate in a pilot project for cancer drug discovery/development research.

In addition to recruiting and mentoring next-generation cancer researchers, the education program will also enhance current researchers' awareness and knowledge of cancer health disparities. As a recognized Hispanic and Asian-serving institution, UH is a perfect place to start.

"We'll be reaching out to students with different majors, encouraging them to explore careers in cancer research and join the effort to find a cure for cancer in underserved ethnic groups," Trivedi said.

The grant also provides support for research aimed at eliminating or reducing cancer health disparities and supported by drug metabolism and medicinal chemistry expertise at UHCOP and compound library/core facilities at the BCM's Duncan Center.

In one of the first two pilot projects, UHCOP's Trivedi and BCM researcher Rachel Schiff, Ph.D., are focusing on novel



UHCOP's Meghna Trivedi, right, is collaborating with Baylor College of Medicine researcher Rachel Schiff on a drug discovery and development pilot project for endocrine therapy-resistant breast cancer.

drug candidates capable of preventing or overcoming resistance to endocrine-based therapies in estrogen receptor- α positive (ER+) breast cancer, which has a higher mortality rate among African-American women despite a similar prevalence.

In the second pilot project, a team led by BCM's Damian Young, Ph.D., is investigating potential drug targets to inhibit an

epigenetic process called DNA hypomethylation, which can serve as a biomarker of hepatocellular carcinoma (HCC). Although HCC is the most common type of primary liver cancer worldwide, it affects under-represented populations at a higher rate in the U.S.

— Laurie Fickman/UH contributed to this story.

CHOW TO HELP BUILD PK/PD CENTER LED BY ALUMNUS

UHCOP Professor Diana S-L. Chow, Ph.D., FNAI, and her former student, Pharmaceutics alumnus Dong Liang, Ph.D. ('95), are continuing their long-time collaboration through the newly established Gulf Coast Consortia Center for Comprehensive Pharmacokinetics and Pharmacodynamics (PK/PD) and Formulation.

The new center is intended to help secure new technology and preclinical trial support for research and development at Texas Southern University College of Pharmacy & Health Sciences — where Liang serves as chair and professor of its Department of Pharmaceutical and Environmental Health Sciences — and development of an on-campus incubator for academic research and regional pharmaceutical startups.

Chow's team has been recruited to perform PK/PD modeling and analyses for rational dose and dose regimen recommendations in efficacy studies; interspecies scaling studies



Aaron Nelson photo

UHCOP Professor Diana S-L. Chow has been recruited by her longtime collaborator and former student Dong Liang to assist with startup activities for the newly funded Gulf Coast Consortia Center at TSU.

to determine First in Human (FIH) dose for Investigational New Drug Applications; and biostatistical services to core users.

"While there is no shortage of brilliant cancer investigators throughout the Texas Medical Center and exciting cancer discoveries on a regular basis, academic resources for developing those discoveries into actual cancer treatments has been largely unavailable, except through contract research organizations, which are often inaccessible to many cancer researchers," Liang said. "This (funding) will allow

us to accommodate many additional studies and ultimately move more Texas cancer investigators' discoveries closer to clinical trials."

Initial funding for the center is being provided by a \$5.1 million grant from the Cancer Prevention & Research Institute of Texas (CPRIT), of which UHCOP is expected to receive approximately \$500,000 over the grant's five-year cycle.



OF OPIOIDS AND OVERPRESCRIBING

Medication Safety Symposium Draws Nearly 200 from Multiple Disciplines to Share Latest Research Trends in Pain Management, Prescription Burden

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

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

The featured speakers were Mellar Davis, M.D., FCCP, FAAHPM, Palliative Care Department and section head, Geisinger Medical Center System; Mary Lynn McPherson, Pharm.D., M.A., MDE, BCPS, CPE, professor and executive director, Advanced Post-Graduate Education in Palliative Care, University of Maryland, School of Pharmacy; Jerry Gurwitz, M.D., chief of Geriatric Medicine, Department of Medicine, University of Massachusetts Medical School; and Paula Rochon, M.D., MPH, FRCPC, vice president, research, Women's College Hospital, professor and RTO/ERO chair in Geriatric Medicine, University of Toronto.

The symposium also featured nearly 30 research poster and

podium presentations by medical, dental, pharmacy and nursing practitioners, academicians, students, postdoctoral fellows and residents spanning a range of subject matter related to medication safety.

All of the accepted abstracts were published in a special section of the peer-reviewed journal, *Research in Social and Administrative Pharmacy*.

AWARD RECIPIENTS

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"

2nd Place Poster — Monica Cheng of McGovern Medical School at UTHealth, "Medication Adherence and Personal Determinants of Health Among Self-Neglecting Older Adults"

At top, presentation winners and finalists Victor Liaw, Chandni Patel, Monica Cheng and Manvi Sharma are flanked by symposium committee co-chair, far right, Rajender Aparasu, Ph.D., FAPhA, and Michael Johnson, Ph.D., and, far left, Holly Holmes, M.D., M.S., and Hemal Mehta, Ph.D. ('14).

FUNCTION AND FORM

Event Highlights Latest Work in Pharmacology, Pharmaceuticals and Medicinal Chemistry Labs

More than a “status update” on current research activities at UH College of Pharmacy, the Department of Pharmacological and Pharmaceutical Sciences’ PPS Research Symposium is a convergence of curious and driven minds in pursuit of life-saving and life-changing medical and scientific discoveries.

The symposium largely focuses on poster and podium presentations by PPS Ph.D. students and postdoctoral fellows, but projects are also accepted by non-UHCOP undergraduate students conducting research in college labs. The 2018 event drew 45 abstracts covering their work developing new therapies or identifying new targets for a range of diseases, from cancer and cardiovascular disease to obesity and diabetes.

In addition, the symposium featured Raghu Kalluri, M.D., Ph.D., professor and chairman of the Department of Cancer Biology, R.E. “Bob” Smith Chair for Cancer Research and director of the Metastasis Research Center at The University of Texas-MD Anderson Cancer Center as its honorary Scholar-in-Residence. Kalluri’s presentations — “Biology and Function of Tumor Stroma and Exosomes in Pancreatic Cancer” and “Lessons Learned During My Journey as a Graduate Student and Postdoctoral Fellow” — offered insights into his current projects and his journey in research academia.

AWARD RECIPIENTS

Graduate Student Podium — **Suchi Raghunathan**, 1st place for “Reprogramming Human Cardiac Progenitor Cells into Pacemaker Cells for Heart Repair,” and **Amer Alali**, 2nd place for “A Comparative Pharmacokinetic sStudy of BPRoLo75 Loaded Polymeric Nanoparticles in Mice Using LC/MS/MS Method”

Graduate Student Poster — **Pavan Chityala**, 1st place for “Protective Effect of Soy Isoflavone-enriched Dietary Supplement on Irinotecan-Induced Steatosis and Diarrhea in Mice,” and **Tasha Womack**, 2nd place for “Effects of Prostacyclin Signaling on Alzheimer’s Disease Associated-Pathologies”

Postdoc Podium — **Aaron Raymond**, Ph.D., 1st place for “Validation of Plectin as a Cancer Stem Cell (CSC) Biomarker and Potential Drug Target in Non-small Cell Lung Cancer (NSCLC),” and **Lei Wu**, Ph.D. (‘14), 2nd place for “Development of a Best-fit Pharmacokinetic Model of Irinotecan and its Active Metabolite, SN-38, in Mice With and Without Inflammation”



Pictured above are, from left, PPS Research Symposium Committee co-chair Tahir Hussain, Graduate Student Poster winner Pavan Chityala, committee member Rashim Singh (Ph.D. '10), Graduate Student Podium finalist Amer Alali, Scholar-in-Residence Raghu Kalluri, committee member Romi Ghose,

Postdoctoral Podium finalist Lei Wu (Ph.D. '14), Graduate Student Poster finalist Tasha Womack, committee member Seungheon Lee, Postdoctoral Podium winner Aaron Raymond, Graduate Student Podium winner Suchi Raghunathan, and committee member Jason Eriksen.



**PRINCE RETIRES
AFTER 28 YEARS
OF TEACHING**

Professor Randall A. “Randy” Prince, Pharm.D., Ph.D. (Hon.), FCCP, FCP, FIDSA, retired from UH in January 2020 after 28 years of teaching and research service to the University and College. Prince will continue working in a research role at The University of Texas-MD Anderson Cancer Center, where he has worked in research and clinical roles as an adjunct faculty member since 1996.

During his career at UHCOP, Prince taught infectious diseases pharmacotherapy and advanced therapeutics as well as coordinated several courses, including pharmacy law. He authored/coauthored more than 100 journal articles and more than two dozen book chapters/continuing education materials, delivered hundreds of presentations and served as a reviewer/editorial board member for more than three dozen publications.

He is credited for laying the foundation for UHCOP’s reputation as a leader in infectious diseases research and clinical patient care, training dozens of graduate and professional students, residents and fellows from UHCOP and other institutions; organizing an annual multidisciplinary infectious diseases symposium for several years; and leading or collaborating on dozens of grant-funded infectious diseases studies and clinical trials.

Prince has been recognized as a fellow of the American College of Clinical Pharmacy, American College of Clinical Pharmacology and Infectious Diseases Society of America, which also honored him with its Distinguished Service Award. A founding member of the Society of Infectious Diseases Pharmacists, Prince received the organization’s Outstanding Service Award.

TAM, ZHANG EARN FELLOW RECOGNITIONS



Vincent Tam
2018 IDSA Fellow

Vincent H. Tam, Pharm.D., BCPS (AQ-ID), professor, has been named as a 2018 Fellow of the Infectious Diseases Society of America (FIDSA) in recognition of his contributions to the field of infectious diseases.

Tam has authored/coauthored more than 150 papers in peer-reviewed journals since 2001, including a 2014 paper published in the journal, “Antimicrobial Agents and Chemotherapy” that was selected for the Pharmacotherapy Paper of the Year Award by the Society of Infectious Diseases Pharmacists (SIDP). Over the course of his career, Tam has received research support from the National Institutes of Health, the National Science Foundation, nonprofit associations and foundations, and the pharmaceutical industry. Tam also is co-inventor on two U.S. patents, including one for novel formulations of polymyxin B and one for a novel rapid diagnostic system to help guide rational dosing of antimicrobials at the bedside. A past member of the SIDP Board of Directors, Tam also was the first pharmacist elected to serve on the National Foundation for Infectious Diseases’ Board of Directors.



Ruiwen Zhang
2018 NAI Fellow

Ruiwen Zhang, M.D., Ph.D., Robert L. Boblitt Endowed Professor in Drug Discovery, was inducted as a Fellow of the National Academy of Inventors at the NAI Eighth Annual Meeting in Houston in April 2020. A board-certified toxicologist and Fellow of the American Association for the Advancement of Science, Zhang is recognized as a leader in drug discovery and development, especially in cancer prevention and treatment.

With over 30 years of experience, Zhang has made major contributions to the discovery of pharmacogenetic/pharmacogenomic syndrome of dihydropyrimidine dehydrogenase (DPD), the rate-limiting enzyme in 5-fluorouracil (5-FU), one of the most used anticancer agents in the world. He is the first to discover and develop new antisense RNA-DNA oligonucleotides for HIV, oncogenes, and Toll-like Receptor immunomodulators (these agents have entered clinical trials) as well as a new approach to orally deliver RNA/DNA oligonucleotides therapeutics for the treatment of human diseases.

NEW FACULTY



Avani Desai
Pharm.D., M.S., BCPS

Before joining the College as a clinical assistant professor, two-time UHCOP alumna Avani Desai, Pharm.D. ('12), M.S. ('14), BCPS, worked for four years with the Michael E. DeBakey Veterans Affairs Medical Center (MEDVAMC) in Houston as a clinical pharmacist, inpatient pharmacy supervisor, acting inpatient pharmacy program manager, and Health-System Pharmacy Administration (HSPA) residency program coordinator. In her first two years with MEDVAMC, Desai served as a PGY1-PGY2 Health-System Pharmacy Administration resident while completing the UHCOP M.S. degree in Pharmacy Leadership and Administration as part of The Houston Program. Desai has held leadership positions in various organizations such as The Houston Program Board of Advisors and the Gulf Coast, Texas and American societies of health-system pharmacy.



Damien Fisher
Pharm.D., A-EC

A long-time preceptor for UHCOP, Damien Fisher, Pharm.D., A-EC, clinical assistant professor, joined the College from the University of Texas Medical Branch Correctional Managed Care, where he served 10 years as a pharmacy clinical practice specialist. In addition to his direct patient care duties, Fisher served as member of the UTMB/CMC's Respiratory Pharmacy and Therapeutics subcommittee, for which his responsibilities included reviewing policies, developing clinical pathways and providing pharmaco-economic consultations for formulary management. Fisher received his Pharm.D. from Florida A&M University College of Pharmacy in 2004, then completed an ASHP-accredited residency with an emphasis on Community and Ambulatory Care at the University of Tennessee. During his four years in academia, he served as a clinical preceptor in various indigent clinics with a focus on diabetes and asthma. In his new UHCOP role, Fisher trains students in the Pharmacy Practice Skills Lab.



Elisabeth Sulaica
Pharm.D.

UHCOP alumna Elisabeth Sulaica, Pharm.D. ('16), clinical assistant professor, joined the College from the University of Kentucky Healthcare, where she served as a clinical staff pharmacist while completing a PGY2 pharmacy residency in cardiology. The year before, she worked as a clinical staff pharmacist and a PGY1 pharmacy practice resident at MEDVAMC. In addition to graduating summa cum laude from UHCOP, Sulaica earned a B.S. in Nutritional Science — also at the rank of summa cum laude — from Texas A&M University. Sulaica has completed both the UHCOP and the American Society of Health-System Pharmacists (ASHP) residency teaching certificate programs as well as the APhA MTM Certificate program. Sulaica has presented at meetings of the American College of Cardiology, ASHP and the Texas Society of Health-System Pharmacists. In addition to her membership in TSHP and ASHP, Sulaica is a member of the Gulf Coast Society of Health-System Pharmacists, APhA and the Texas Pharmacy Association.



Shane Tolleson
Pharm.D.

UHCOP alumnus Shane Tolleson, Pharm.D. ('14), clinical assistant professor and director of Ambulatory Advanced Pharmacy Practice Experiences, joined the College after two years as a clinical pharmacy specialist in ambulatory care at Memorial Hermann Hospital's Medication Therapy and Wellness Center. In this role, Tolleson managed patient medication regimens under MTM collaborative practice agreements for anticoagulation, diabetes, smoking cessation, pharmacotherapy, hypertension and heart failure, provided extensive medication and disease state counseling; and precepted pharmacy students and residents. He completed a PGY1 pharmacy practice residency at CHI St. Luke's Health Baylor St. Luke's Medical Center. Tolleson has presented at the American Society of Transplantation's AST Fellows Symposium, Alcalde, TSHP Annual Seminar and the ASHP Midyear Clinical Meeting. In 2016, he was named the Baylor St. Luke's Medical Center Pharmacy Department's Pharmacist of the Year.

REMEMBERING MOHAMMAD ASGHAR

UHCOP Mourns the Passing of Pharmacology Colleague, Teacher

The UH College of Pharmacy family is mourning the recent passing of researcher and teacher Mohammad Asghar, Ph.D., associate professor of pharmacology at the College.

Asghar obtained his Ph.D. from Aligarh Muslim University, Aligarh, India. Following his doctoral work on renal function studies in India, he moved to the Karolinska Institute, Stockholm, Sweden, where he worked as a post-doctoral fellow on a project which was aimed at investigating renal dopaminergic system. Three years later, he moved to the U.S., where he continued to advance his post-doctoral work in this area in the laboratory of UHCOP Professor Mustafa Lokhandwala, Ph.D.

In 2012, following the award of his first major federal grant from National Institutes of Health, he was appointed as a tenure-track assistant professor at the College. Quickly, he dedicated himself to developing his research program, while actively participating in teaching and service activities. He fostered collaborations and sought new funding and received awards for research excellence and other accolades.

In 2015, he was diagnosed with stage 4 non-small cell lung cancer. Despite his serious illness, chemotherapy, radiation therapy, surgical intervention, extended hospital stays and ICU admissions at The University of Texas-MD Anderson Cancer Center in Houston, he maintained his research productivity, continued new grant submissions, and maintained his teaching and service activities. In 2018, he was promoted to associate professor with tenure.

Asghar's primary research focus was on the roles of aging, obesity and diabetes in the development and progression of hypertension, which is a major risk factor for stroke, heart diseases and other cardiovascular events. Although the cause of hypertension is multi-factorial, sodium (salt) is recognized as a risk factor for hypertension.

Two key counter-regulatory receptor systems present in the kidney, namely angiotensin II and dopamine receptor systems,



Matt White photo

play pivotal role in the maintenance of sodium homeostasis and blood pressure. Abnormal functioning of these receptor systems is linked to the development of hypertension.

Building on this earlier pioneering work, his research findings suggested that oxidative stress in the kidney, and the resultant dysfunction of the renal D₁ dopamine receptor system was a major contributor to age-associated hypertension. This evidence provided important mechanistic connections between oxidative stress in the kidney and changes in the function of renal D₁ receptor and its association with hypertension (reported in a 2006 issue of *Free Radical Biology and Medicine* and a 2009 issue of the *American Journal of Physiology*).

In his lab, researchers were engaged in asking some of these highly critical and complex questions in animal and cell culture models, using state-of-the-art multidisciplinary approaches, which served as the focus of his multiple NIH awards. In addition to having his research published in high-quality journals, he presented his research through invited seminars, international meetings and focused conferences. He was involved in service as a reviewer for the National Science Foundation, American Heart Association and different international granting agencies.

Asghar, born in 1966, passed away Feb. 2, 2019, at The University of Texas-MD Anderson Cancer Center. He is survived by his wife of 24 years and department colleague, Samina Salim, Ph.D., and their daughter, Saman Asghar.

COLLEAGUES, FAMILY FUND ENDOWMENT FOR ASGHAR FELLOWS

In a fitting tribute to a teacher and researcher who relished the intellectual engagement of mentoring young minds in the pursuit of knowledge and purpose, family members, fellow alumni of his alma mater, and UHCOP colleagues of the late Mohammad Asghar have established an endowed fellowship program aimed at encouraging undergraduate students to pursue careers in research.

“He was very fond of mentoring kids, not just from the college level, but also high school and middle school kids,” said UHCOP Associate Professor Samina Salim, Ph.D., Asghar’s widow and former colleague. “When undergraduates come to my lab, typically it will be a graduate student or a postdoc who will teach and train them — but not Asghar. A former graduate student from the College commented that he learned so much — all from Asghar — because there was no ‘middle man.’”

Salim said she and Asghar had long discussed trying to create an opportunity to both mentor and support an aspiring researcher, but weren’t sure about how to go about it a formalized way. After Asghar’s passing, the alumni association of his alma mater — Aligarh Muslim University in India, where he received his B.S., M.S. and Ph.D. degrees in Biochemistry — approached Salim doing a memorial of some kind and the Asghar Memorial Summer Undergraduate Research Fellowship Program was born.

FUND DONORS

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Lindsay Schwarz and John Rodgers
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APARASU TO ADVISE INDONESIAN UNIVERSITY AS FULBRIGHT SPECIALIST

UH College of Pharmacy’s Rajender R. Aparasu, Ph.D., FAPhA, professor and chair of the Department of Pharmaceutical Health Outcomes and Policy, has been selected by the Fulbright Specialist Program to assist a Jakarta, Indonesia-based university in enhancing its pharmacy curriculum and academic research programs.

The college’s first Fulbright Specialist, Aparasu will travel to the Southeast Asian nation for a six-week assignment beginning in August to advise Atma Jaya Catholic University’s administrators and faculty members on a variety of issues related to scholarship and research development. Aparasu’s planned activities include participating in workshops and group discussions on writing scientific/academic research papers, mentorship and professional development of faculty researchers.

“I am excited to visit Indonesia and assist Atma Jaya’s leadership and faculty in developing state-of-art pharmacy curricula and improving their health research capabilities to reach the University’s programmatic goals,” Aparasu said. “I am glad that the Fulbright Specialist Program is providing this amazing opportunity to share my academic and research expertise while learning about pharmacy training, academia and culture in Indonesia.”

Author of more than 100 journal articles and editor of two books, Aparasu has more than 20 years of experience in health outcomes research and developing pharmacy curricula, courses and assessment programs consistent with contemporary and evolving pharmacy practice and accreditation standards.

“I am pleased to know that more of our faculty are taking advantage of the Fulbright U.S. Scholar Program,” said former Fulbright Awardee and UH Senior Vice President for Academic Affairs and Provost Paula Myrick Short, Ph.D. “This academic distinction, which is highly coveted, will enhance the quality of faculty international teaching and research. Faculty pursuing global educational outreach contribute towards our campus internationalization.”

HUSSAIN, LOKHANDWALA APPOINTED AS BUCKLEY ENDOWED PROFESSORS

Thanks to a generous bequest from the estate of a former UHCOP dean and his wife, two UHCOP faculty members — including one who would follow in the late dean's footsteps — have been appointed to college-based endowed professorships created by the couple's gifts.

Professor Tahir Hussain, Ph.D., FAHA, has been appointed the Joseph P. and Shirley Shipman Buckley Endowed Professor of Drug Discovery. Hussain joined the UHCOP in 2095 and rose through the ranks, accepting a promotion to professor and department head at another university, but he returned to his roots at UH a year later.

The recipient of Rho Chi Society Excellence in Teaching award three times



HUSSAIN



LOKHANDWALA

and the UH Research Excellence and Scholarship Award, Hussain has received several National Institutes of Health grants in excess of \$1 million and has authored or coauthored nearly 100 papers in such journals as *Hypertension*, *PLOS One* and the *European Journal of Pharmacology*.

Executive Vice Dean for Research and Professor Mustafa F. Lokhandwala, Ph.D.

('75), FAHA, FASN, has been named the Buckley Endowed Professor for the Heart & Kidney Institute (HKI).

Lokhandwala's relationship with the Buckleys dates back decades to when Lokhandwala was a graduate student at UH. Buckley recruited Lokhandwala to the college faculty after graduation, and the mentee would himself become dean of the College and administrative head of the HKI, which was founded by Buckley as the Institute for Cardiovascular Studies.

Both Lokhandwala and Hussain's research interests are very closely related to Buckley's chosen field of hypertension, specifically in the angiotensin II (AT2) receptor's role in regulating blood pressure.

Faculty Accolades

Rajender R. Aparasu, Ph.D., FAPhA, professor and department chair, was appointed to the Scientific Advisory Council of the American Society of Pharmacovigilance.

Bernadette Asias-Dinh, Pharm.D. ('11), BCACP, BCPS, CDE, clinical assistant professor, completed the two-year American College of Clinical Pharmacy Academy Teaching & Learning Certificate Program.

Krishna M. Boini, Ph.D., assistant professor; **Lindsay Schwarz**, Ph.D., instructional associate professor; and **Matthew A. Wanat**, Pharm.D., BCPS, BCCCP, FCCM, clinical associate professor, were honored with the College's 2018 Faculty Excellence Awards in Research, Service and Teaching, respectively.

Austin De La Cruz, Pharm.D., BCPP, clinical assistant professor; **Xinli Liu**, Ph.D., associate professor; and **Sujit Sansgiry**, Ph.D., professor, earned the Rho Chi Society Beta Omicron Chapter's Excellence in Teaching Awards presented at the 2018 Robert L. Boblitt Lecture.

Joydip Das, Ph.D., was promoted to professor, while colleagues **D. Gomika Udugamasooriya**, Ph.D., associate professor, and **Yang Zhang**, Ph.D., associate professor, were awarded tenure, in September 2018.

Joydip Das, Ph.D., professor, has been appointed to the International Society of Biomedical Research in Alcoholism's Publication committee.

Tahir Hussain, Ph.D., Joseph P. Buckley and Shirley Shipman Buckley Professor of Drug Discovery; **Alexa Vyain**, Pharm.D., AAHIVP, clinical assistant professor; and **Louis Williams**, Ph.D., were recognized with the UH Pharmacy Council's inaugural Faculty Appreciation Awards for the Fall 2018 semester.

Tahir Hussain, Ph.D., Joseph P. Buckley and Shirley Shipman Buckley Professor of Drug Discovery, was among past recipients of the UH Teaching Excellence Award who were honored on court during halftime at a March 2020 UH Cougars basketball game.

Aditi Marwaha, Ph.D. ('05), instructional assistant professor, was awarded an inaugural grant from the Alternative Textbook Incentive Program, a program of the UH Libraries and UH Office of the Provost. The program aims to reduce student expenses by creating online reference materials in lieu of printed textbooks.

Kimberly A. Nguyen, Pharm.D. ('02), clinical assistant professor, was appointed chair of the American Association of Colleges of Pharmacy Experiential Education Special Interest Group.

Douglas Thornton, Ph.D., Pharm.D., BCPS, assistant professor, was appointed as a reviewer for the Study Section on Psychosocial Interventions with Office-Based Opioid Treatment for Opioid Use Disorder of the Patient Centered Outcomes Research Institute.

Matthew A. Wanat, Pharm.D., BCPS, BCCCP, FCCM, clinical associate professor, earned a Society of Critical Care Medicine (SCCM) Presidential Citation for his service to the organization.



'OUTSTANDING CHAPTER'

SCCP SECURES NATIONAL TITLE

UHCOP Chapter Wins Award Only 4 Years from Founding

The UHCOP Chapter of the Student College of Clinical Pharmacy (SCCP) took the national title as the 2018 American College of Clinical Pharmacy (ACCP) Outstanding Student Chapter, marking its first title win only four years after its formation.

The award was presented during ACCP's 2018 Global Conference on Clinical Pharmacy in Seattle, Wash., where UHCOP chapter member Goran Flajc was among the Outstanding Student Chapter Member honorees.

"Our chapter tries to offer programs with tangible benefits that are useful to them as students and as future clinical pharmacists, such as getting certified to educate patients about hepatitis C and perform oral swab screening for the disease," said Chapter President and Pharm.D. student Katie Rascon.

One of SCCP's projects was hosting an Opioid Overdose Prevention & Naloxone Training Seminar, which drew more than 70 UHCOP students to learn about the fast-acting opioid-reversal drug and Texas' standing orders governing pharmacists' ability to dispense and administer the medication. The chapter also distributed 20 donated naloxone kits to high schools and outpatient substance abuse treatment centers after training.



Top, SCCP current and past presidents Katie Rascon and Anna Cantwell, respectively, accept the Outstanding Student Chapter Award at the ACCP Global Conference (Steve Schneider photo/courtesy of ACCP), and the chapter was well represented at the meeting (photo courtesy of SCCP).

"We put a lot of effort into exploring relevant topics to supplement exposure to experiences students may encounter outside of the traditional curriculum, because we think (it) will better prepare them, as well as get everyone thinking about how changes in the law affect your practice," said Pharm.D. candidate and past president Anna Cantwell, noting the chapter also hosted workshops on the pharmacist's role in medicinal marijuana and physician-assisted suicide.

"Our programs for earlier students focus on topics to help them better prepare for important steps in the curriculum, such as our OSCE (Objective Standardized Clinical Examination) Preparation Course, 'A Day in the Life of a Pharmacist' series that gives a glimpse of working in clinical specialties or settings, our networking workshop, and tutorial sessions. Meetings for P3s and P4s were geared toward easing the transition into their responsibilities during fourth-year rotations, such as drug monograph or case presentations and journal clubs."

The chapter also made sure to keep things light at times, including hosting a Spelling Bee for UHCOP students and faculty and a "Jeopardy" TV show-style competition for pharmacy and other health-affiliated students.

"During the spring semester, students are more stressed, so we wanted to give everyone a break but still learn about other professional programs or reinforce topics," Cantwell said.

SNPHA

UHCOP CHAPTER

CLAIMS 3RD NATIONAL TITLE IN 4 YEARS



The UH College of Pharmacy Chapter of the Student National Pharmaceutical Association has claimed its third national title in four years in the Large Chapter Category of the Chauncey I. Cooper Chapter Excellence Awards at the SNPhA National Conference in Charlotte, N.C.

Divided into large, medium and small chapter categories, competing chapters earn points throughout the year for their service and professional development activities, especially activities that support national initiatives such as HIV, chronic kidney disease, and other health priorities. The top three chapters in each category then must make a presentation at the national meeting, with the winner and finalists determined by national committee.

Using a casino theme, the UHCOP chapter rolled with its impressive numbers for the year, including 262 events and more than 8,100 patients impacted. In addition, the presenters showcased new or expanded efforts during the year, such as a focus on interprofessional events with dentistry, optometry and

medical students, Hurricane Harvey outreach efforts, pharmacist shadowing and certification courses as kidney health educators.

Third-year Pharm.D. student Jovan Dudley, the UHCOP chapter's 2018-20 president, said starting the year off in the midst of Hurricane Harvey and the recovery efforts and other challenges nonetheless gave the chapter an opportunity to show its resiliency and teamwork.

"This year, we plan to demonstrate our commitment to transforming the norm by strengthening opportunities for our pre-pharmacy members, providing a mental health training program for students, and enhancing our interdisciplinary care for high school students embarking on careers in health care."

In addition to 2017-18 Chapter President Darian Allen being elected National President-elect at the national meeting, she received the Dr. Nicole Avant Presidential Scholarship and Walgreens Advancement of Diversity in the Community Award.



Left, UHCOP SNPhA Chapter members and faculty advisor Louis Williams celebrate again winning the Chauncey I. Cooper Chapter Excellence Award.

Right, outgoing national officers and Pharm.D. Class of 2018 graduates Vivian Lieu, Region 4 Facilitator; Gifty Gyebi, National Vice President; and Chidi Iroegbu, National Bridging the Gap Chair, enjoy a final moment together at the 2018 national meeting.





RELUCTANCE TURNS TO RESOLVE

Darian Allen to Serve on National Stage with SNPhA President-elect Win

For a pharmacy student who was reluctant to even enter the field, Darian Allen has thrown her heart and soul into the opportunities and obligations of the profession: After serving as president of the UHCOP Chapter of the Student National Pharmaceutical Association (SNPhA) in only her second year, Allen went on to win the office of National President-elect at the 2018 SNPhA National Conference in Charlotte, N.C.

Allen not only won the national election, but she also brought home the Dr. Nicole Avant Presidential Scholarship and the Walgreens Advancement of Diversity in the Community Award — and, most importantly in her opinion, the UHCOP chapter also captured the national Chapter Excellence Award in the Large Chapter category.

Although Allen had been around pharmacy most of her life — she worked as a certified pharmacy technician after completing a high school training program, and her mother worked as a hospital pharmacy technician — she said it wasn't until she was nearing the end of her undergraduate education that she gave a pharmacy career serious consideration.

Allen credits a professor from her days as

“opened my eyes to the different career areas in pharmacy beyond community and hospital.”

“I was attracted to the idea of being able to interact with people in a different way than say, a medical doctor,” said the Beaumont, Texas, native and youngest of three in a single-parent home.

Allen's term leading the UHCOP chapter got off to a rough start, with flooding from Hurricane Harvey taking a toll on several chapter members of the organization as well as causing a one-week cancellation of classes.

“Becoming a first-time leader, it was an adjustment to learn how to manage people and their personalities and how to manage conflicts or opposing viewpoints,” she said.

As normalcy returned for most students, Allen and her members put their plan for the year in action — including organizing a large-scale interprofessional health fair and hosting its annual alumni dinner — but as the semester drew to a close, she said something wasn't clicking.

“We were ranked 11th, and we needed to be in the top three of our category,”

an undergraduate while earning dual bachelor's degrees in Genetics and Biochemistry, as well as a UHCOP recruiter who

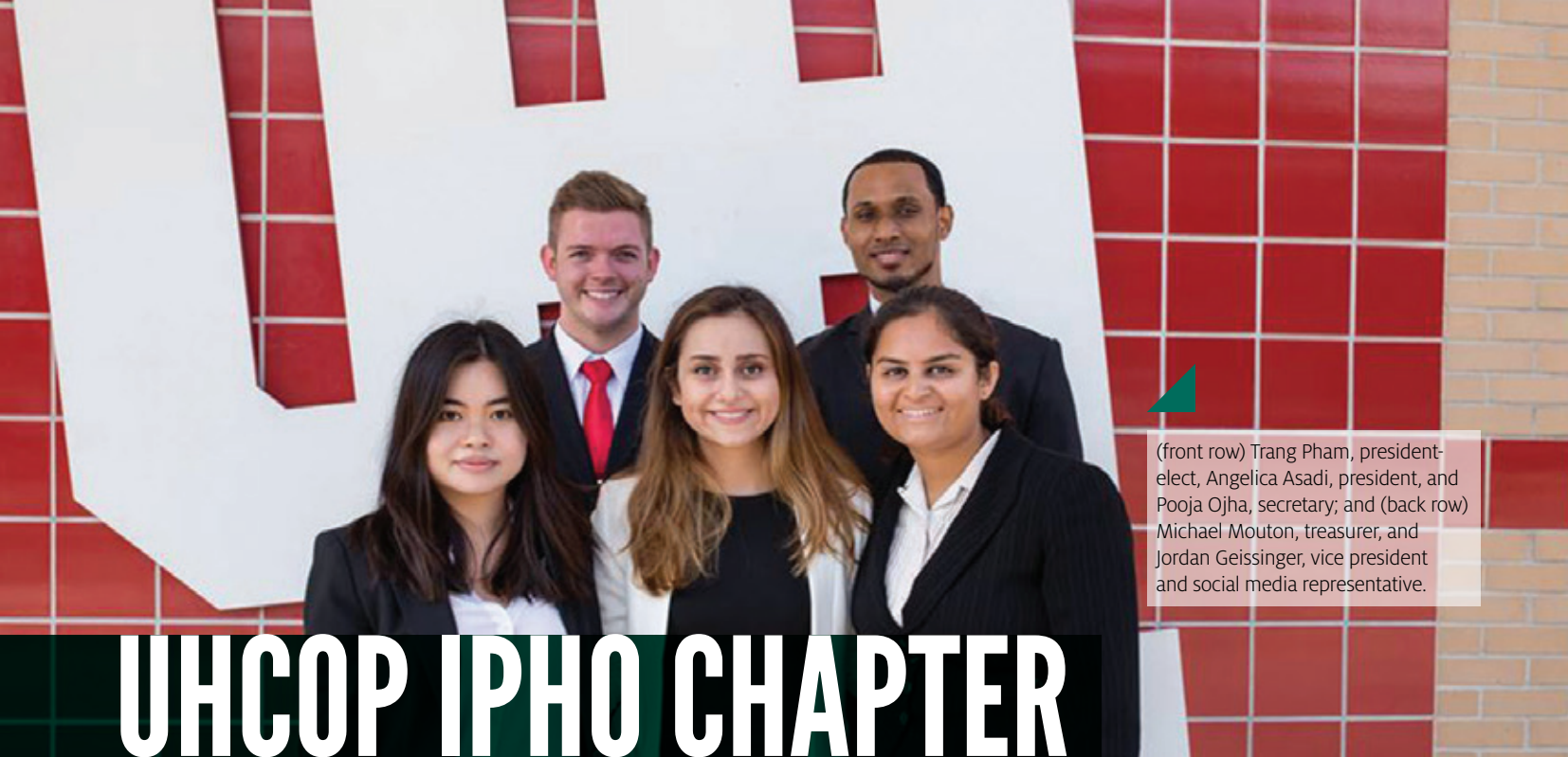
Allen said. “I told our officers that we're not meeting the expectations set by our predecessors, but we're going to use the storm as a strength, not as a crutch.”

The tide turned, so to speak, in the spring semester: Although the chapter held a second, even more successful, interdisciplinary health fair along with other patient-care focused events, members launched an outreach campaign to expose more high school students to the benefits and non-traditional career opportunities within the profession.

Allen said the experience of working with high school students was one of the most gratifying of the year, which also became a big part of her campaign speech that earned a standing ovation.

“I think what really struck people (in the audience) was the emphasis on high school development,” Allen said. “Something that even many of our members may not know is that high school students are eligible to join SNPhA. There are a lot of students in underserved areas where drugs, gangs, growing up in ‘broken homes’ and other factors that may discourage them from pursuing college and professional careers, whether it's pharmacy or not.”

In a serendipitous turn of events, Allen will take over leadership of the organization when its 2020 National Conference comes to Houston.



(front row) Trang Pham, president-elect, Angelica Asadi, president, and Pooja Ojha, secretary; and (back row) Michael Mouton, treasurer, and Jordan Geissing, vice president and social media representative.

UHCOP IPHO CHAPTER TOP 5 IN NATION

2 Members of Fledgling College Chapter of Industry Pharmacists Organization Appointed to National Positions

After only its first full year of operation, the UH College of Pharmacy Chapter of the Industry Pharmacists Organization secured a “Top 5” ranking among IPHO student chapters nationwide, while two of its members earned national appointments.

Led by founding president Chimeka Ike, Pharm.D. ('17) and vice president Gifty Gyebi, Pharm.D. ('17), the chapter was approved in October 2016, but was considered ineligible to participate in the chapter reporting/ranking process for the 2016-17 academic year.

The chapter's first priorities during its first official year of eligibility were to make students aware of the organization and the non-traditional career opportunities available for pharmacists in industry as well as recruit members. In addition to partnering with other student organizations on professional development programs, the chapter continued its “Pathway to Fellowship” program in which past industry fellows shared their experiences and advice for becoming a competitive candidate.

Pharm.D. candidate Angelica Asadi, who served as 2017-18 chapter president, said it was unexpected honor to achieve such a high national ranking in such a short time.

“We were very dedicated to not only increasing student knowledge about industry pharmacy, but also giving students the professional development tools necessary to pursue a career in this

field, and I am proud to see that our dedication made an impact,” Asadi said. “Being a new organization, we lacked resources and the budget necessary to implement all of our student development ideas; however, through collaboration with other organizations, we were able to implement all that we had planned.

“After only two years of chapter activity, it is remarkable to see that our incoming P1s know that industry is a possibility, and our outgoing P4s are preparing to pursue a career in this field, and we are truly proud of everything IPHO has done to contribute to that.”

Following the completion of her chapter term of office, Asadi was appointed as National Student Officer of Professional Development and Chief Internship Officer. In these respective roles, Asadi promotes the professional growth of IPHO chapters nationwide and oversees the IPHO Virtual-Flex Internship program, which allows participants to gain insights into real-world industry operations as well as collaborate on projects and network with industry professionals.

Jennifer Nguyen, 2018-20 chapter president-elect, also was selected to serve in a higher office within IPHO. Nguyen was appointed 2017-18 Regional Student Officer for the Western Region, with oversight responsibility of the seven collegiate chapters in the region. In this role, Nguyen works closely with the IPHO leadership staff, fellows and industry pharmacists to ensure the success of the regional chapters, serving as a liaison to fellowship programs, and identifying and sharing best practices among chapters.

Established in 2012, IPHO has grown to more than 50 chapters nationwide with thousands of student, fellow and pharmacist members.

VIDEO CHALLENGE TURNS SPOTLIGHT ON CREATIVITY, PASSION

Communication is one of the core skill sets of a professional pharmacist, and UHCOP Pharm.D. students once again demonstrated their creative talents, technical savvy and ability to connect with their audience beyond the written and spoken word with their projects submitted for the college's 2018 Pharm Flix Video Challenge.



administrators, faculty, staff and students, the theme of the 2018 competition was "Why UHCOP?" In their responses, the teams provided their own takes on the culture of academic excellence, professional development and service; the instructional and practice learning facilities in Health 2; and the welcoming atmosphere for students of all backgrounds.

UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph., established the Pharm Flix Video Challenge in 2014 to encourage students to bring greater awareness and recognition of the profession in the general public.

"We need to do more to change the public's perception of who we are and our

underappreciated role in improving patient health outcomes," Pritchard said.

The video challenge also provides a unique platform for students to showcase the unique educational experience available in the UHCOP Pharm.D. program.

With entries judged by a panel of college

The videos can be viewed on the college's YouTube channel at:

<https://tinyurl.com/uhcop-pharmflix18-1>

<https://tinyurl.com/uhcop-pharflix18-2>

<https://tinyurl.com/uhcop-pharflix18-3>

<https://tinyurl.com/uhcop-pharflix18-4>

Student Accolades

Pharmaceutical Health Outcomes & Policy Ph.D. student **Tyler Varisco** was selected for the 2018 Walmart Scholars Program, which provided financial support to attend the American Association of Colleges of Pharmacy 2018 Annual Meeting.

Pharmaceutical Health Outcomes and Policy Ph.D. students completing summer 2018 internships were: **Benjamin Lewing** – Shell Health; **Sanika Rege** – Abbvie; **Swarnawa Sanyal** – Ascent Pharmaceuticals; **Aisha Vadhariya** – Regeneron Pharmaceuticals; and **Qingqing Xu** – Abbvie. Pharmaceutics Ph.D. students completing internships were: **Katherine Shatzer** – FDA's Office of Clinical Pharmacology; **Yifan Tu** – Boehringer Ingelheim; and **Changhong Yun** – Genentech.

Pharm.D. students awarded scholarships from the Texas Pharmacy Foundation during the 2018 Texas Pharmacy Association Annual Conference & Expo were: **Mariellee Aurelio** and **Kaycie Rathburn** – TPF Professional Recovery Network Scholarship; **Brittany Musselman** – TPF Larry "Neal" McLaugherty Scholarship; and **Aimen Naveed** – TPF General Scholarship.

Pharm.D. students awarded 2018 TSHP Research & Education Foundation scholarships were: **Bradley Endres** – Micheline & Bourjois Abboud Scholarship, and **Aimen Naveed** – Glenda Lawson McRee Scholarship.

Pharm.D. students **Mariellee Aurelio**, **Callie Downs**, **Joo Hee Kim**, **Amilda Medina**, **Autumn Prestenbock**, **Kaycie Rathburn**, **Breanna Russ**, and **John Samson** and faculty members **Austin De**

La Cruz, Pharm.D., BCPP, and **Matthew Wanat**, Pharm.D., BCPS, BCCCP, FCCM, attended the American Pharmacists Association from Institute on Alcoholism & Drug Dependencies in Salt Lake City, Utah.

Pharm.D. student **Sylvia Stefanos** completed the six-week Houston Methodist Pharmacy Student Observership Program, which provides students with early exposure to health-system pharmacy between the P1 and P2 year.



The team of Jessie Ho, second from left, and Hafeez Adewusi, far right, finished in third place in the Clinical Skills Competition at the Student National Pharmaceutical Association Regions III, IV @ V Conference in Sandusky, Ohio, in February 2019.

‘SPARx’ OF LEADERSHIP

TPA Applauds Ahmad for Student Advocacy Program



Years from now, it wouldn't be a shock to see recent UHCOP graduate Shawn Ahmad, Pharm.D. ('18), turning his passion for professional advocacy into a higher, elected office. Although he downplayed the suggestion, Ahmad nonetheless is steadfast in his dedication in advocating for the profession and patients.

In recognition of his leadership and commitment to student and professional advocacy, Ahmad was honored with the Texas Pharmacy Association's Distinguished Student Pharmacist Award at the 2018 TPA Annual Meeting & Expo.

Ahmad said his advocacy interest dates back to his P1 year when he attended TPA Day at the Capitol, the organization's annual trip to Austin to allow students and practitioners to observe the legislative process during open session and meet with individual legislators or their staff to voice their support, opposition or concerns.

"The experience really sparked my interest in advocacy, and I saw the impact we can make if we all come together with a focused mindset to make our voices heard because no one else is going to do it," Ahmad said. "Advocacy is something our profession has lacked in the past, but it's so important now that we're at the table to make sure we're fully represented."

Ahmad's leadership within the Academy of Student Pharmacists began at the end of his P1 and continued with progressive leadership offices throughout his education, including an advanced pharmacy practice experiential rotation in Association Management with TPA.

During this time, Ahmad and his fellow student leaders began to chart a new course for encouraging and equipping student pharmacists with the necessary tools to be effective advocates. The

“
... I saw the impact
we can make if we all
come together with
a focused mindset
to make our voices
heard ...

— Shawn Ahmad

program, Student Advocacy and Relations (SPARx), is designed to educate students to engage various audiences and stakeholders in a series of modules: "Advocating in Your Community," "Inter- and Intra-professional Collaboration," "Regulation," and "Legislation." Participants in the program, which was rolled out statewide for the 2018-20 academic year, will receive a certificate upon completion.

"One of the things that really struck me between my P1 and P2 years was that as students visited the capitol only every other year, they didn't understand all of the work that went into making it happen," Ahmad said. "Hopefully, what they learn is something they can and will use throughout their career. I encourage students to learn about the issues and understand that if they want live up to the potential of their degree and all that they've devoted four years plus to achieving, they have to stay involved."



ACCP GERIATRICS TRAVEL AWARD

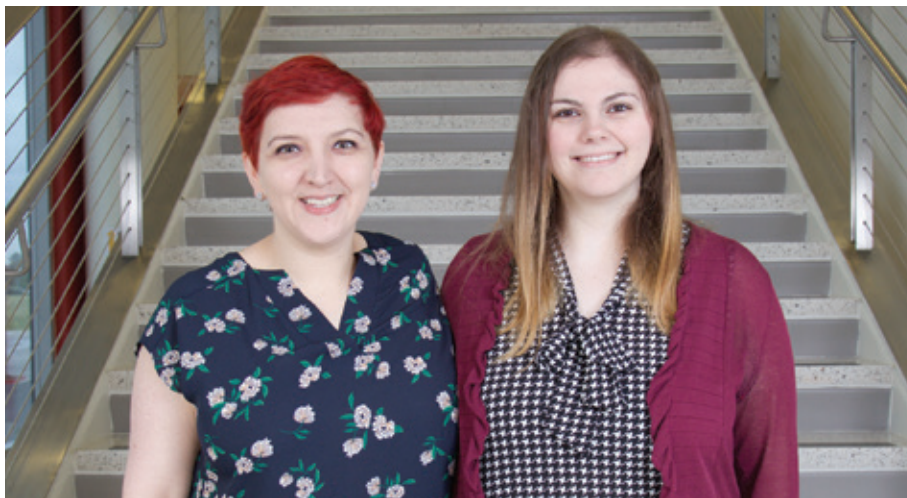
As society continues to redefine concepts of the aging population, third-year Pharm.D. student Katie Rascon also wants to be part of the evolving practice of health care in the elder/geriatric community.

Rascon, a third-year student and 2018-20 President of the Student College of Clinical Pharmacy, said her interest in the field was buoyed by participation in the “No Place Like Home” interprofessional education program operated by Baylor College of Medicine in collaboration with UHCOP. The program brings together supervised medical and pharmacy students into the homes of mostly homebound elderly patients with multiple disease states and health issues.

“This experience broadened my understanding and insight into adapting guidelines to address the physical, psychological and social needs of geriatric patients,” Rascon said. “It gave me perspective on how quality of life can be as important as quantity of life, and this has to be taken into consideration when determining to start or discontinue medications.”

Rascon’s passion for transformational elder care helped her secure one of only two travel awards from the American College of Clinical Pharmacy’s Geriatric Practice and Research Network to attend the 2018 ACCP Global Conference on Clinical Pharmacy.

Rascon said she hopes to be involved with “socially progressive elderly living center” models that are designed to combat loneliness and provide physical and mental stimulation and activity.



DUO FINISHES IN NATIONAL TOP 10 OF ASHP CLINICAL SKILLS COMPETITION

The powerhouse clinical duo of Pharm.D. candidates Stephanie Crowley and Diane Drecean are celebrating the achievement of a long-standing goal: Advancing to the top 10 finalists in the 2018 American Society of Health-System Pharmacists National Clinical Skills Competition.

Crowley and Drecean have been among the highest achieving UHCOP students in the competition at the local and state level since their P1 year. The teammates won their class division each year in the local UHCOP competition, as well as the statewide title as P1s and an honorable mention as P2s.

With their third- and fourth-year local wins, Crowley and Drecean secured the privilege of representing the College in the national competition.

“It wasn’t as intense as we were anticipating, probably because we had experience doing it last year,” Drecean said.

“It was funny because we were joking right before we got the case that if it was HIV, we’re sunk. Then we opened the case file, and it was HIV,” Drecean said. “I think among pharmacy students, 99 percent don’t like HIV because it’s so complicated, even though we get a good foundation in it at UH — probably more than a lot of other schools.”

Crowley said they took a very strategic approach to their preparations during both trips to nationals, including timing their care-plan development and oral presentation and asking a faculty member to review and give feedback on their care plans.

“That was a really important step for us, because we would have been fumbling around had we not done that,” Crowley said. “The oral presentations are in an open forum, so we stayed to hear the presentations and picked up some tips. Also, at the end, the case writer goes over the case and the rubric, which give a better idea of what they were looking for and where you lost points.

“So for this year’s competition, our preparation strategy was based more on looking over last year’s case and making sure we focused on areas where we missed points and not be concerned about areas that weren’t even graded.”

Although they didn’t climb higher than the final round, Crowley and Drecean said they weren’t too disappointed because they achieved their original goals of making it to the national level in their P3 year and advancing to the top 10 in their P4 year.

“It is a huge accomplishment; when you look at the teams that made it to the top 10, a lot of them are very seasoned teams from schools that regularly make it to the finals,” Crowley said.

HEART HUSTLE 5K

The Operation Heart team from the UHCOP Chapter of the American Pharmacists Association-Academy of Student Pharmacists (APhA-ASP) recently laid it on the (finish) line by organizing the “Heart Hustle 5K” run/walk event to promote cardiovascular health while raising funds for the American Heart Association (AHA).

The Feb. 2 event to kick off American Heart Month in Lynn Eusan Park on the UH campus drew more than 150 participants, spectators and volunteers and raised more than \$2,600 for the AHA. The APhA-ASP volunteers, many of whom also participated in the run/walk, provided more than 60 free blood pressure and blood glucose screenings; educated participants and spectators on cardiovascular health awareness; and coordinated other activities, such as rope-jumping competitions.



DIABETES PROJECTS EARN 3RD AWARD FOR ASP CHAPTER



Through a mix of hands-on screenings, one-on-one and group presentations, and social media activities, the UH College of Pharmacy Chapter of the American Pharmacists Association-Academy of Student Pharmacists’ messages about preventing and managing diabetes reached more than 6,700 people over the course of the 2017-18 academic year.

The chapter’s activities were so impressive that it was recognized with its third consecutive Operations Diabetes Award at the 2018 APhA-ASP Region 6 Midyear Regional Meeting in St. Louis, Mo. Over the course of hosting or participating in 32 events during the year, the Operation Diabetes team provided more than 1,000 blood glucose screenings and 42 diabetic foot exams as well as presented risk reduction/disease management education to more than 1,600 individuals.

The chapter made a deliberate effort to increase its support of American Diabetes Association initiatives, including the national APhA-ASP organization’s partnership with Walmart for a wellness day that included more than 40 UHCOP Pharm.D. students providing screenings and education to 600 individuals at more than 20 Greater Houston-area stores. The chapter also joined forces with students from the UH College of Optometry, UH School of Nursing and a fellow UHCOP organization for an interprofessional health fair to mark World Diabetes Day.

In addition, chapter members reworked some of their most popular and thought-provoking outreach materials, including the “Rethink Your Drink” board, a display of various popular drinks and the amount of sugar content in granular form for each beverage, and the “My Plate Activity,” a display — along with a coloring book, for children — in which participants mix and match laminated images of food on top of a plate to understand how they can improve their current diet with healthier choices.



LAKE-WALLACE READIES TO LEAD TSHP INTO FUTURE

“I want to tap into the potential of many of those people I have had the opportunity to meet along the way.”

— Sarah Lake-Wallace

A lumna Sarah Lake-Wallace, M.S., Pharm.D. ('00), FTSHP, will be inducted as president-elect of the Texas Society of Health-System Pharmacists at TSHP's 2020 Annual Seminar in Frisco. Lake-Wallace's three one-year terms as president-elect, president and immediate past president will run through 2021.

Lake-Wallace currently serves as pharmacy manager at TIRR Memorial Hermann, where she has worked for more than a decade and previously held leadership positions in patient safety and clinical effectiveness.

Her involvement with TSHP started back as a first-year pharmacy student at UHCOP, when she joined the UHCOP Chapter of the Student Society of Health-System Pharmacists and served as a student volunteer coordinator for TSHP, a member of the TSHP Student Section, and co-coordinator of the then-fledgling clinical skills competition.

After graduation, Lake-Wallace continued her TSHP service in a range of roles, including as coordinator of the clinical skills and disease state management competition for 10 years, as chair or vice-chair of TSHP's membership, communication and professional affairs councils and, for nearly a decade, as a board member and later president of the TSHP Research & Education Foundation. In 2013, Lake-Wallace became a member of the inaugural class of TSHP Fellows honored for sustained contributions to the organization and the profession.

"I can't remember a time in my profession when I wasn't

volunteering or doing something for the organization," Lake-Wallace said. "TSHP has given so much to me, and cliché as it may sound, I wanted to give a little bit back."

Noting that it wasn't until now that she felt the timing was right to pursue leadership of the organization, Lake-Wallace credited her many colleagues, mentors and collaborators for helping her prepare for the role and its responsibilities.

"Having those connections is priceless," she said. "I have had the opportunity to get in front of groups to present and had to work to find my voice and message. I also have seen the struggles and needs of the organization over the years, which has provided me with perspective I think will be helpful."

The nearly yearlong role of president-elect designee provides incoming leaders time to provide support for their predecessors' priorities and begin developing plans for their own initiatives.

"Despite my years serving on the Board of Directors, there is still so much for me to learn," she said. "What I envision for my presidential year will be to find innovative ways to help bring out opportunities and potential in all members of TSHP, continue to strengthen the legislative voice of pharmacy, and create collaborative space for those in the profession of pharmacy, including technicians, industry partners, retired pharmacy professionals, and pharmacists.

"I want to tap into the potential of many of those people I have had the opportunity to meet along the way."



LEWIS, SPIER LATEST COOGS APPOINTED TO TEXAS STATE BOARD

Two UH College of Pharmacy alumni — Donald “Donnie” Lewis, R.Ph. (B.S. ’75), and Julie M. Spier, R.Ph. (B.S. ’86) — have been appointed to the Texas State Board of Pharmacy Board of Directors by Texas Gov. Greg Abbott.

A resident of Athens, Texas, Lewis is a relief pharmacist for Malakoff Pharmacy and Tyler Hematology Oncology Pharmacy. He has practiced in hospital and community pharmacy for over 40 years, during which he owned two of his own pharmacies. Additionally, he operates a wedding and event venue and is a licensed real estate agent.

He is former Athens City Council member and Mayor Pro-Tem. Previously, he volunteered for the Pendulum Project Culinary Program and has coordinated pharmacy services for medical mission trips to Africa, Peru and Ecuador. His TSBP term will expire Aug. 31, 2020.

From Katy, Texas, Spier is director of pharmacy operations for the southern division of Albertsons, Randalls and Tom Thumb, where she oversees 158 locations in Texas, Louisiana and Arkansas. Through the years, she has served in the capacity of pharmacist, pharmacy manager, regional pharmacy manager and patient care services pharmacy manager.

Spier is a member of the Texas Federation of Drug Stores,

where she has served as president, secretary/treasurer and vice president. She is a member of the Texas Pharmacy Association, American Leadership Forum Med Class 5 and the UHCOP Dean’s Advisory Council, which she has twice chaired. Additionally, she is a longtime, active member of Scouts BSA. Her appointment will expire Aug. 31, 2023.

Spier said she was encouraged to volunteer for the position by fellow pharmacists she holds in high regard.

“I truly believe we should all be servant leaders, and after they planted the seed I felt called to move in this direction,” she said. “I believe the board gives a unique service opportunity to serve the citizens of Texas, my peers and the greatest profession.”

Lewis and Spier join fellow UHCOP alumna Jennifer “Jenny” Downing Yoakum, R.Ph. (B.S. ’97), on the TSBP board. One of four members of the Downing family who graduated from UHCOP, Yoakum was appointed to the TSBP board by Abbott in 2015.

Yoakum — who specializes in veterinary medicine and compounding — serves as pharmacist-in-charge at the family’s owned-and-operated Med Shop Total Care in Longview, with parents/co-founders Pat Downing, R.Ph. (B.S. ’70) and Jan Downing and sister Dee Anne Downing Hollis, R.Ph. (B.S. ’94). Yoakum’s term is scheduled to end in 2021.

TPA HONORS

TPA Honors Larry McClagherty with 2nd Outstanding Consultant Pharmacist

Although his career path and life took a different path than he expected, UHCOP alumnus Larry McClagherty, R.Ph. (B.S. '72), MPH, said he holds no regrets for what they've allowed him to accomplish and give back to his passions: pharmacy, education, accessibility for the physically impaired and, of course, football.

After graduating high school at 17, Larry attended UH on a four-year football scholarship and became the only person in his family to graduate college. During his 45 years in a pharmacy career that spanned the community, academic and long-term care settings, he estimates he worked with 125 nursing homes and long-term care (LTC) facilities managing up to 5,000 patients per month and precepted hundreds of pharmacy students.

In recognition of his work in pharmacy consulting and support for pharmacy education, Larry was recognized with his second Texas Pharmacy Association's Robert L. Hayes Outstanding Consultant Pharmacist award at the 2018 TPA Annual Meeting & Expo in July. He previously received the award in 1998.

One of the accomplishments that gives him the most pride is being able to give back to UH pharmacy students not only in his time through preceptorship, but financially through scholarships at UH and TPA.

The brainchild of Larry and then-fellow UHCOP faculty member Louis Williams, the UHCOP scholarship golf tournament marks its 40th year in 2020. The endowment spawned from the tournament's early years has grown to more than \$150,000 in value and has generated scholarships for dozens of students.

McClagherty also established the Larry "Neal" McClagherty Scholarship at the TPA Foundation, which has grown to become the largest endowment at the charitable arm of TPA. The scholarship, which is earmarked for UHCOP students, is named for the McClaghertys' son. Neil passed at the age of 27 in 2010, but not before a huge impact on the lives of his fellow classmates, friends and others throughout their tight-knit Friendswood community despite being nonverbal and wheelchair-bound his entire life from cerebral palsy.

After several years working two jobs, Larry decided a change was needed, and he signed on with the LTC arm of the pharmacy chain for whom he had been working part time. As his LTC consulting career and expertise progressed, he even worked for the company co-founded by his latest honor's namesake. Kathy (University of Houston-Clear Lake '79), a registered nurse, and Larry decided to take a chance by calling their own shots, which would allow them to have more flexibility and consequently more time for Neal.

"I really felt called to do independent consulting, where I could



have a direct impact on patient care," Larry said. "Pharmacy has a lot of opportunity, but it's not going to call you up — you have to seek it out."

Larry continued to precept students through the consulting pharmacy experiential rotations, which often also included students providing pharmacy support care at a nonprofit summer camp for children and teenagers with a range of disabilities. Larry's experiences in dealing with mobility and access issues also led to his spearheading a fundraising campaign to build an all-access playground at their church in their longtime home of Friendswood.

After closing shop in 2017, Larry and Kathy retired to the Texas Hill Country but remain Houston Cougars football season ticket-holders. Although he never realized his dream of owning his own pharmacy in his hometown of Robstown, Texas, Larry said he is proud of their accomplishments, including being recognized among UH's inaugural class of Cougar 100 top alumni businesses.

"I've been able to work with and learn from so many pharmacists who I admired," he said. "I've been able to touch a lot of lives personally and professionally. In Friendswood, I'd fill prescriptions for astronauts, aerospace engineers, artists and other amazing people, and working in long-term care, every resident has a story and a legacy if more people took the time to listen."

I've met sportscasters, a man who fought against (the late Muhammad) Ali, and a guy who rode with Pancho Villa and became an executive producer on the Rawhide TV show. Just talking to him made his day; it was better than any medicine I could have given him."

Desai Named Inaugural MSL of Year

UHCOP alumnus and Dean’s Advisory Council member Prashant Desai, Pharm.D., B.S. ('96), senior medical science liaison at AbbVie, was crowned the inaugural U.S. Medical Science Liaison of the Year by the MSL Society.

Desai’s work has ranged from competitive strategy, launch planning, integration with brand teams, and managing national and international “thought leaders.”

Desai has been recognized with the President’s Award in 2020 and the Poised Award-Decide Smart & Sure in 2018. Desai previously worked in MSL roles for Abbott, Biogen Idec and Amgen, where he was honored with the company’s MVP Award in 2003.

Specializing in the areas of immunology, rheumatology, dermatology and gastroenterology, Desai has multiple product launch experiences, including Aranesp (darbepoetin alfa), Neulasta (pegfilgrastim) for Amgen and Humira (adalimumab) for AbbVie.



photo courtesy of MSL Society

He’s currently serving on the launch team for Abbvie’s new Rinvoq (upadacitinib) for moderate to severe rheumatoid arthritis.

“Winning the ‘MSL of the Year-U.S.’ has been a culmination of my passion for medicine, coupled with a strong belief that physicians value ‘clinicians’ and the expertise they bring to them for making well-informed decisions for their patients,” Desai wrote of the honor for which more than 100 fellow MSLs had been nominated. “This belief is predicated on the ‘evidence-based medicine’ as the benchmark and having a continuum of dialogue on the latest evolution in their respective specialty.

“The accolades this year made me truly understand what a remarkable impact we make on patient care and helped pave my way to give back to so many who helped me to this pinnacle. I hope my leadership continues to develop and allows me the ability to make an ever more broader impact for patients.”



Minze Honored as ACCP Fellow

UHCOP alumna Molly Graham Minze, Pharm.D. ('05), has been recognized as a Fellow of the American College of Clinical Pharmacy at ACCP's Global Conference on Clinical Pharmacy in October 2018.

"This is quite an honor for me; it is recognition as a pharmacy clinician at the highest level," she said. "I set out to be a clinical pharmacist in my P3 year, and to be recognized as a fellow, one who has consistently provided excellence in clinical practice for at least 10 years, is such an honor. This honor is only secondary to receiving promotion for me."

Minze serves as associate professor and regional director of Student Affairs and Admissions for the Abilene Campus of the Jerry H. Hodge School of Pharmacy at Texas Tech University Health Sciences Center in Abilene. She maintains a practice site at Hendrick Medical Center's outpatient Heart



photo courtesy of Molly Graham Minze

Failure/Cardiac Rehabilitation Center as a clinical consultant.

During her time at Texas Tech, Minze has established four ambulatory care pharmacy practice sites across Abilene, either with Texas State Board of Pharmacy-authorized physician collaborative practice agreements or as a privileged and credentialed provider at a Department of Defense facility.

With primary clinical research interests in diabetes, endocrinology, hypertension, hyperlipidemia and cardiology, her work has been published in such journals as *Pharmacotherapy* and the *Journal of the American Society of Health-System Pharmacy*.

Minze's work with ACCP dates back to 2006, primarily through the organization's Endocrine & Metabolism Practice Research Network, for which she currently serves as chair.

Alumni Mailbox

Kathleen M. Giacomini, Ph.D., B.S. ('74), was recognized with the American Foundation for Pharmaceutical Education's 2018 AFPE Bill Heller Mentor of the Year Award.

Pratik Rane, Ph.D. Pharmaceutical Health Outcomes and Policy ('17), who serves as senior manager, Global Health Economics, at Amgen, was named a 2018 Top Reviewer for the Research in Social and Administrative Pharmacy journal.

Alex C. Varkey, Pharm.D. ('05), M.S., FAPhA, director of Pharmacy Services at Houston Methodist Hospital, served as the Rho Chi Society Beta Omicron Chapter's 2018 Robert L. Boblitt Lecturer.

Larry McClougherty, R.Ph. (B.S. '72), MPH, was among the football players from the 2068 and 2078 Houston Cougars teams honored at a UH Alumni Association-hosted reunion alongside UH coaching legend Bill Yeoman. McClougherty, left, is pictured with teammate Bill Bridges. Photo courtesy of UH Alumni Association.



'08 in the House

In celebration of their 10-year graduation anniversary, Pharm.D. 2008 classmates gathered up spouses, significant others and children to enjoy a walking tour of the College's home in Health 2, catch up with old friends and teachers, and present the College with a signed, framed class photo.



ENDOWED PROFESSORSHIPS, CLASSROOM CREATED WITH BEQUEST FROM BUCKLEYS

“To place your name by gift or bequest in the keeping of an active educational institution is to ... make a permanent contribution to the welfare of humanity.”

— U.S. President Calvin Coolidge

Remembered for their genuine kindness and his deft leadership in guiding the trajectory of the College, a late UH College of Pharmacy dean and his wife made one final gift that will further position the College for success in the decades to come.

A bequest from the estate of Joseph P. Buckley and Shirley Shipman Buckley has funded two endowed professorships — the Buckley Endowed Professorship in Drug Discovery and the Buckley Endowed Professor for the Heart & Kidney Institute — and a classroom in the Health 2 building.

A second lieutenant in the U.S. Army Air Corps during World War II, Joseph “Joe” Buckley earned a B.S. in pharmacy from the University of Connecticut and M.S. and Ph.D. degrees from Purdue University.

He joined the College in 1973 as dean and professor from the University of Pitts-

burgh, where he and his research group had conducted pioneering work in hypertension as the first to identify the central effects of angiotension II in 1960.

Marked by three books and more than 200 publications, Buckley’s research career contributions revolutionized concepts and understanding of hypertension and paved the way for development of a novel group of hypertensive medications.

During his 13-year tenure as dean, Buckley was instrumental in developing the College’s professional and graduate programs (including creation of the Pharmacology and Pharmaceutics Ph.D. degree programs), increasing the number of faculty and support for the College, including a building in the Texas Medical Center.

After stepping down as dean in 1987, Buckley continued on as a professor and director of the Institute for Cardiovascular Studies (now the Heart & Kidney Institute) that was created with special funding from the Texas Legislature until his full retire-



ment in 1991. Buckley died two years later at the age of 69, followed by the passing of Mrs. Buckley in 2017.

Executive Vice Dean for Research Mustafa F. Lokhandwala, Ph.D. ('75), who was a graduate student when he met Buckley and was later recruited to the faculty by Buckley, said he was a little surprised but far from shocked when he learned of the Buckleys’ bequest.

“Joe Buckley and his wife were always very kind and generous individuals,” said Lokhandwala, who serves as the inaugural Buckley Professor for the Heart & Kidney Institute. “They helped and interacted with faculty and students in a variety of ways, and had excellent relations with alumni and constituents.”

HARGROVE ESTATE FUNDS SCHOLARSHIP, PROFESSORSHIP AND CENTER

A planned gift from the estate of Else M. Hargrove (B.A. French '65) and Philip L. Hargrove (B.S. Pharmacy '66) is providing new avenues of support for UHCOP students and advancing the College and its research mission.

The bequest from the couple’s estate has been allocated among the Else and Philip Hargrove Endowed Scholarship in the amount of \$300,000, the as-yet unawarded Else and Philip Hargrove Endowed Professorship for Drug Discovery in the amount of \$250,000, and the Else and Philip Hargrove Stu-

dent Resource Center in Health 2 in the amount of \$50,000. The Hargrove bequest also included gifts to UH Athletics and the UH Law Center.

Unfortunately, very little is known about the Hargroves, other than Philip worked as a hospital pharmacy supervisor under the Department of Veterans Affairs and preceeded Else in death. Else, who passed in 2016 at 80 years of age in The Woodlands, was remembered in her obituary as enjoying discussing politics and sports, and adoring her cat.

MADING SOCIETY INDUCTION

The Mading Society welcomed its largest class of UHCOP donor inductees — as well as three Philanthropist “Red Coat” recipients for milestone giving — during the Society’s 2018 Induction & Dinner at Houston’s Belltower on 34th Street.

The Mading Society was established in 2007 by the University of Houston College of Pharmacy to recognize individual donors who have made gifts or bequests of \$10,000 or more to the College. In 2008, membership privileges were extended to corporations and foundations that contribute \$25,000 or more in cumulative gifts to the College. The Society was named in memory of Cora and Webb Mading, the first major benefactors of the College.

“Words cannot adequately express our gratitude for the generosity and loyalty of our alumni and friends in their support of pharmacy education,” said UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph. “Members of the 2018 class and our red Coat honorees have made a lasting impact on our College and our students through new scholarship and program endowments, support for our new state-of-the-art home in Health 2 and other areas of need within the College.”



2018 Inductees

Roger W. Anderson
 R. Pansy ('90) and Jeff Chan
 Ronald B. Dowell ('61)
 Mary ('80) and John ('77) Espinoza
 Clay Hawkins ('80)
 Sharathcha S. Hegde (Ph.D. '90)
 Ed Horton ('74)
 Jasper J. (FS '65) and Deborah Lovoi, Jr.
 Keisha ('97) and Jasper J. (Pharm.D. '02) Lovoi III
 Rondena M. Mackey ('69)
 Rakesh V. Patel ('95)
 Maureen ('93) and Sean (UHCL M.B.A. '04) Powers
 Stanley M. Reinhaus
 Tyra (UHCL M.S. '02) and Edward C. Stemley, Jr.
 Robby ('71) and Shari Timberlake

Joyce A. Tipton ('79) and Lucy Marguerite Moyer ('80)
 Alex (Pharm.D. '05) and Divya Varkey
 Matthew A. Wanat
 Sheila Sue Lidstone ('79, UHCL M.A. '86)
 Christopher Charles Webber ('80, M.B.A. '85)

In addition, six Mading Society inductees or existing members were recognized with “Cougar Red” coats in appreciation for reaching milestone giving levels:

David DeVido ('64) and Rosemarie DeVido
 Barbara A. and G. Chester Irons
 Rondena M. Mackey ('69)
 Nicholas J. Martino ('64)



2018 PHARM.D. GOLF CLASSIC

UH College of Pharmacy alumni and friends battled a sultry summer morning and challenging elevations to raise funds for UHCOP Pharm.D. students at the 2018 UHCOP Golf Classic.

Proceeds generated from individual player and team registrations as well as sponsorships are used to fund individual student scholarship awards, travel awards to professional meetings and support for non-research academic needs not funded by state resources, such as computers. The 2018 event raised \$2,700 for students.

The UHCOP Golf Classic Committee, co-chaired by faculty members Elizabeth Coyle and Doug Eikenburg, gratefully acknowledged the support of the 2018 sponsors:

Gold — Jeff ('05) and Jennifer ('05) Harrison;

Silver — Brookshire Brothers Pharmacy;

Red & White — Chi-Ngo Chen ('02), Doug Eikenburg, Jim Rutan ('92), David Wallace ('98) & Sarah Lake-Wallace ('00); and

Cougar — Pharm House Drug Co. and Charles "Chuck" Kneip ('92).

The first- and second,-place Low Gross teams were Fred Emmite ('77) and Dick, Rick ('04) and Kyle Schneider, followed by Jim Rutan, John Hargroue, Chuck Kneip and Melchor Garza ('92). The first- and second-place Low Net teams were Lamar Pritchard, William Heath, Jerry Merrill and Jonathan Merrill ('16), followed by Doug Eikenburg, Kathy Ryan and Steve Garfield. Among the individual competitions, Thomas Chen dropped the Closest to the Pin shot, and Rick Schneider smacked the Longest Drive.

In addition to the paid sponsorships, the following individuals and companies provided door prizes as an additional thank you to players: Beautique Day Spa & Salon, Elizabeth Coyle, Doug Eikenburg, Hand & Stone Massage and Facial Spa, Kendra Scott, Chip Lambert, Michael's Cookie Jar, Raspberry Rose, Shiva Indian Restaurant, Sweet Moment Nail & Pedi, Vincent Ford Custom Apparel, and David Wallace & Sarah Lake-Wallace.



The team of Rick Schneider ('04), Fred Emmite ('77), Dick Schneider and Kyle Schneider won the First Place, Low Gross title.



The team of Dean Lamar Pritchard, William Heath, Jerry Merrill and Jonathan Merrill ('16) won the First Place, Low Net title.

MOHR FAMILY ENDOWS SEMINAR SERIES

To help future and current pharmacists at UH College of Pharmacy stay at the forefront of innovative thinking and action, alumnus John Mohr and his wife Aimee have established an endowed seminar series for the College.

“As pharmacists continue to move the needle in the area of clinical and translational research, Aimee and I felt compelled to provide a venue to highlight these efforts to improve patient outcomes through novel approaches to pharmacotherapy,” John said.

The John and Aimee Mohr Clinical Pharmacy Practice and Translational Research (PPTR) Seminar Series at UHCOP will focus on speakers with notable practice and leadership expertise in pharmacy practice and research and their work and perspectives on cutting-edge pharmacy practice acceleration models and optimal use of current and emerging pharmacotherapies.

A pharmacist with 20 years of experience as a clinician, researcher, teacher, scientist and medical affairs leader, John received his B.S. in biomedical sciences from Texas A&M University and his Pharm.D. from UHCOP in 1998.

John’s career in clinical practice began at



photo courtesy of John and Aimee Mohr

Memorial Hermann Hospital, and he also held a faculty position at the UTHealth School of Medicine in Houston from 2003 to 2007.

In addition to his clinical responsibilities at Memorial Hermann, he served as an investigator for multiple phase 3 and 4 clinical trials and conducted research focused on the pharmacokinetics and pharmacodynamics of antibiotics. He also served on the Institutional Review Board for the Montrose Clinic as well as the committee for the Protection of Human Subjects at the UT School of Medicine.

John’s entry to the pharmaceutical industry was at Cubist Pharmaceuticals in 2007, where he had multiple roles during

his tenure — including field medical affairs liaison and ultimately leading the medical affairs strategy group — to support the commercialization of Cubicin, Difcid, Sivextro and Zerbaxa.

John next served as vice president of Medical Affairs at the Medicines Company, where he led medical affairs strategy for Orbactiv and Minocin IV. He then was named vice president of medical affairs at Tetrphase, where he managed building out the medical affairs function to support the launch of Xerava.

He currently serves as senior vice president for Clinical Development and Medical Affairs at scPharmaceuticals, where he leads the research and development for the subcutaneous diuretic and antibiotic programs.

Kevin W. Garey, Pharm.D., M.S., FASHP, professor and chair of the PPTR department, said he is ecstatic about the exponential learning and networking opportunities available with the gift.

“This endowment will allow us to bring in world-class speakers and help us connect to pioneers in clinical and translational research from Houston, the U.S., and around the globe,” Garey said.

BORCK BACK AT UH TO ADVANCE COLLEGE

UH alumna and former Honors College Director of Development Beth Kungel Borck ('03), MBA, has joined UH College of Pharmacy to help advance its educational, research and service missions among alumni and other partners.

“We’re very excited about what Beth brings to the College, including personal familiarity with the UH culture and the aspirational mentality and work ethic of our alumni as well as our supporters and partners in the community,” said UHCOP Dean F. Lamar Pritchard, Ph.D., R.Ph.

Borck joins the College with a diverse portfolio of experience, including donor relations and stewardship, strategic planning, public and alumni relations, marketing and communications, and special event coordination. In addition to her work at the Honors College, Borck served as coordinator of career services, alumni events

and marketing at the University of Houston-Clear Lake and box office manager for Moores Opera House.

Most recently, Borck worked in community support specialist and guest relations officer roles for Dow Chemical Co. in the Middle East.

“The energetic diversity of the campus population, coupled with the grand aspirations of the University, create a dynamic environment in which to work,” Borck said. “I intend to create robust partnerships with our donor community to ensure that the dean’s vision for the future of UHCOP is fully supported.”



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See more at <https://tinyurl.com/uhcop-h2-open-house-vid>