BUFFALOPHARMACY

[2015 – 2016 ANNUAL REPORT]

University at Buffalo
School of Pharmacy and Pharmaceutical Sciences

[MESSAGE FROM THE DEAN]

Academic year 2015-2016, I am proud to say, was another success for our students and faculty. Their accomplishments continued to raise the bar on our ability to not just lead, but also to push boundaries in education, research, scholarship and clinical practice.

Leading the way was Dr. Robert Straubinger. His $3.8 million, NIH-supported, US-Ireland R&D Partnership Programme grant to study development of personalized nanoparticle drug delivery systems for pancreatic cancer is exploring new ways of improving the access of drug to tumor sites. Our faculty are also key players in the $16 million NIH Clinical and Translational Science Award (CTSA) to UB to develop approaches to speed the delivery of new drugs, diagnostics and medical devices to patients. And with a $1.3 million NIH Fogarty International Center grant, Dr. Gene Morse is again partnering with the University of Zimbabwe to continue an HIV Clinical Pharmacology Research Training Program for doctoral candidates and fellows.

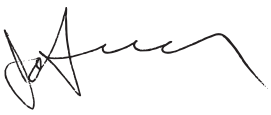
The triumphs of our faculty were robust, with high national and international impact. Dr. Marilyn Morris was recognized as a State University of New York Distinguished Professor, the highest academic rank in the SUNY system. She was also appointed member of the NIH Xenobiotic and Nutrient Disposition and Action Study Section. Dr. Dhaval Shah and Dr. Murali Ramanathan received University at Buffalo Exceptional Scholar Awards, Dr. Edward Bednarczyk was elected president of APhA-APRS for the 2017-18 term, and Dr. William Jusko was awarded Doctor Honoris Causa by Paris Descartes University.

Dr. Bednarczyk and Professor Karl Fiebelkorn led successful efforts on drug counseling and patient education. Bednarczyk was interviewed by major news syndicates regarding newly established medical marijuana dispensaries. Fiebelkorn provided leadership and direction regarding the regional opioid abuse epidemic by working with the local health departments, health care providers and legislators in community outreach and prevention. The school also joined forces with the Erie County Department of Health and the Harm Reduction Coalition to offer a free training program to community pharmacists to dispense naloxone, an antidote for opioid overdose.

Student recognition was similarly impressive. Nick Smith, '17, received the American Society for Microbiology Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) Program Award for his work with mentor Dr. Brian Tsuji to better understand the pharmacodynamics of antibiotic combination therapy to treat highly resistant superbugs. Pharmaceutical sciences students Xu Zhu and Xi Chen received the American Association for Pharmaceutical Scientists (AAPS) Graduate Student Award in Pharmacokinetics, Pharmacodynamics, Drug Metabolism and Clinical Pharmacology, with Xin Miao receiving the AAPS ePoster Award. Our Student Pharmacists for Global Outreach group engaged in community support and service learning with a mission trip to the Dominican Republic as well as spring break activities to aid the underserved in the Chicago area.

2015-16 laid a strong foundation for our enduring success in education, research and leadership. Building strategic partnerships, securing competitive extramural funding, and creating a dynamic learning environment are core to our mission and allow us to maintain strong leadership in pharmacy and pharmaceutical sciences' advancement. I look forward to continuing our journey together to create the best opportunities for our students, faculty, staff and alumni.

Sincerely,



James M. O'Donnell, PhD
Professor and Dean

[MISSION]

To improve health through innovation and leadership in pharmacy education, clinical practice and research.

[VISION]

The vision of the University at Buffalo School of Pharmacy and Pharmaceutical Sciences:

- To maintain our ranking as one of the top 25 schools of pharmacy and pharmaceutical sciences in the United States
- To provide quality education to pharmacy practice and pharmaceutical sciences students at all academic levels, using best practices and evidence-based educational approaches, which enables our graduates to advance their professions
- To be a leader in education, research, practice and service
- To be a respected institution that advances basic, clinical and translational research
- To meet and improve society's health, wellness and health care
- To advance pharmacy practice, including interprofessional team-based models
- To provide an academic environment that promotes effective mentoring, professional growth and development, and lifelong learning

[VALUES]

The values of the University at Buffalo School of Pharmacy and Pharmaceutical Sciences guide our efforts:

- Excellence in teaching, research, practice and service
- Integrity in and accountability for our teaching, research, practice and service
- Embodiment of the highest ethical standards in our education, research, practice and service activities, with the expectation our graduates will do the same as the next generation of leaders in their professions
- Establishment of a learning environment that embraces diversity, inclusiveness, equity and respect for all persons
- Organizational values that promote and reward critical thinking and continuous quality improvement

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[BENCH TO BEDSIDE, BEDSIDE TO BENCH]

A contemporary perspective on the future of science and practice

Individually and in concert, Dhaval K. Shah, PhD, assistant professor, pharmaceutical sciences, and Nicholas M. Fusco, PharmD, clinical assistant professor, pharmacy practice, articulate the future of clinical practice and scientific knowledge.

At the bench, Shah is an up-and-coming force in the advancement of translational research to improve cancer therapeutics.

At bedside, Fusco is honing teaching techniques to better prepare PharmD students to work seamlessly within the interprofessional teams now accountable for optimal healthcare delivery.

Both faculty members are passionate about developing new therapies and practical applications for various disease states—especially in children.

"There are a lot of questions that need to be answered about how medications are used and how they are dosed, with regard to certain populations," says Fusco.

[BENCH: DR. SHAH]

On the fourth floor of Kapoor Hall, Shah is breaking ground in biomedical technologies that potentially will help the increasing number of people diagnosed with cancer. He is accelerating PK/PD knowledge by engineering novel antibody-drug conjugates (ADCs) that target and treat a range of cancers with greater efficacy and less toxicity than traditional chemotherapy.

"You can make the ADC work against any cancer you want. Right now I am working on one for glioblastoma brain cancer. And after having kids I am really interested in research on pediatric cancers for which there are no treatments, like retinoblastoma, which is an eye cancer."

BENCH

At the bench, Dr. Shah is an up-and-coming force in the advancement of translational research to improve cancer therapeutics.

Affably modest, Shah is emerging as a brilliant visionary in the contemporary realm of biotechnology. He began his impressive career at home in India as an obedient son whose father advised him to pursue a career in pharmacy.

So he earned a bachelor's degree in pharmacy from Gujarat University in 2002, placing fourth in the all-India graduate engineering exam given to 100,000 students—and then second in the entrance exam for the National Institute of Pharmaceutical Engineering and Research (NIPER), which enrolls only 10 students annually. A 24-hour train ride away from home and loving family in Western India, Shah says NIPER changed his life.

"I learned so much about research there," he says, recalling graduate bench work using rats to investigate transdermal drug delivery.

After earning his graduate degree, he decided to pursue an advanced degree in the U.S.—partly because his future wife, who had been a fellow undergrad student, was then studying pharmacy in New York. He connected with a professor researching transdermal drug delivery in the Midwest and, in August of 2004, left India to begin his studies in the United States.

But when he started classes at the University of North Dakota, he realized he would not learn anything new from its PhD program. Searching online for a better academic fit, he came across SPPS Professor Joseph Balthasar, PhD, director of the UB Center for Protein Therapeutics, who was investigating treatments for ovarian cancer.

"I always wanted to make a difference in treating cancer, and he had pretty brilliant ideas," says Shah, whose grandmother died of stomach cancer shortly before he left India. "I thought 'this is the school I want to apply to.' I wanted to join a school that could teach me more than I already knew."

He arrived in Buffalo in September 2005 to begin coursework in the pharmaceutical sciences PhD program. Capturing a coveted spot in Balthasar's lab, Shah spent the next five years mounting computational research on ovarian cancer. "We came up with novel combinations that can be tested clinically," he says.

After graduation Shah opted for a career in industry, and landed a position in September 2010 as clinical senior translational scientist at Pfizer, advancing after two years to principal scientist. By 2013 he wanted to move on, and was offered a position at Genentech. When he requested a recommendation from SUNY Distinguished Professor William Jusko, PhD, chair of the SPPS pharmaceutical sciences department, Jusko invited him to join the faculty.

"It was a once in a lifetime opportunity. When your mentors tell you that you are good enough to become a colleague, you know you have accomplished something," Shah laughs. "If it were not for Dr. Jusko and Dr. Balthasar I would never have come back, because those are the two people I admire the most, my mentors. And I wanted to really see what I could do as Dhaval Shah, myself, rather than doing great things for Genentech or Pfizer."

Since 2013, Shah has captured a prestigious $1.5 million NIH RO1 grant titled "Translational Systems Pharmacokinetic Models of Novel Anticancer Biologics," and received equipment, seed funding awards, and grants from the pharmaceutical industry to support his research. In 2014, he became the only two-time recipient of the American Association of Pharmaceutical Scientists (APPS)

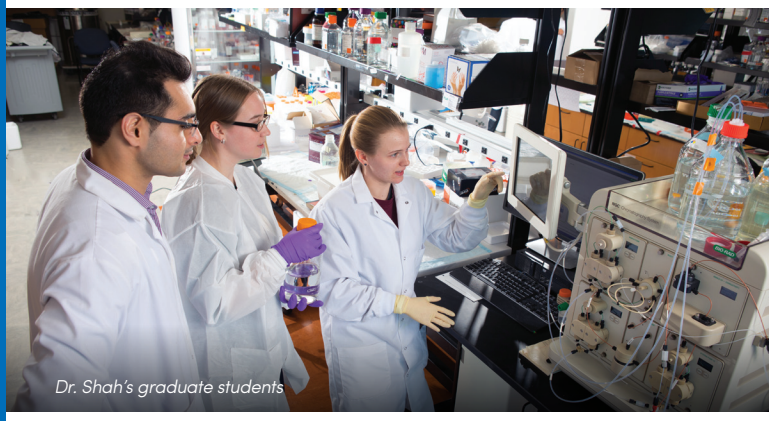
BEDSIDE

At bedside, Dr. Fusco is honing teaching techniques to better prepare PharmD students to work seamlessly within the interprofessional teams now accountable for optimal healthcare delivery.

Outstanding Manuscript Award in Modeling and Simulation, and last year he earned the 2016 University at Buffalo Exceptional Scholar Young Investigator Award.

Shah was also recognized in 2016 as the lead scientific innovator for Boston-based cancer drug developer Oncolinx, which captured the winning prize of $1 million in the 43North competition, part of Gov. Andrew Cuomo's Buffalo Billion Initiative. (Part of the award will support a post-doc position in Shah's lab.)

Oncolinx combines its own chemotherapy drugs with ADCs developed by Shah or one of 14 pharmaceutical companies with which it is partnered. Soon to be based in Buffalo, the company is unique in that the cytotoxic drugs they are working to market with Shah's help will be effective against 30 types of cancer, including breast, lung and pancreatic cancers.



Dr. Shah's graduate students

"They give us the drug, we attach it to the antibody and then we put them in the cells to find out which cells it kills, how much it kills, and what concentration you need," Shah says of his Oncolinx role as scientific advisor, and academic and investigational partner.

Shah eloquently simplifies the explanation of antibody-drug conjugates by comparing them to a Trojan horse that delivers toxic chemotherapeutics only to a cancer site and nowhere else. But the design process is exceedingly complex, and his lab is among only a few in universities with the scientific talent and technological expertise to develop ADCs.

In Kapoor Hall, he and his 15-member lab team are re-engineering mammalian and yeast cells to express novel proteins and using phage display, a virus-based technology, to create a library of millions of antibodies to discover novel therapeutic antibodies. The bench-to-bedside objective is to generate novel antibodies and protein therapeutics that can identify cancer cell receptors and can be loaded with anti-cancer drug molecules to generate new and efficacious conjugates.

"We are also trying to understand, on a cellular level and a tissue level, the pharmacokinetics of the ADCs," Shah says.

"What we are trying to figure out quantitatively is how much more receptor expression on cancer cells makes them a good target for ADCs. The other thing we're trying to understand is whether or not the number of receptors on a cell really correlates with the number of drug molecules that enters into a cancer cell."

At Pfizer he learned that in translational science, predicting PK/PD outcomes is more critical than describing them. While three ADCs have been FDA-approved for clinical use, 50 more are still in development. In real time, Shah anticipates it will be several years before the protein drug can move to clinical trial.

"Coming from industry I know that determining the quality of a drug is paramount. Many people don't actually go the extra mile and find out if the quality is good enough to test in vivo," he says.

"I think it's going to take just one more year to troubleshoot the technology with the ADC molecules we have. And then it's probably going to take a few more years of animal studies to show it's a safe molecule before we go to clinic."

"They give us the drug, we attach it to the antibody and then we put them in the cells to find out which cells it kills, how much it kills, and what concentration you need," says Shah of his work with Oncolinx.

In the classroom, he instructs one of the few PK/PD protein therapeutics courses currently in existence, and teaches chemistry and advanced PK/PD to PharmD students. Looking ahead, he hopes his groundbreaking bench work results in one or two safe, effective and affordable cancer therapies—especially for treating children.

"If I can accomplish a drug or two that go to clinical trials and are approved, that will be a slam dunk," Shah says.

[BEDSIDE: DR. FUSCO]

Nicholas Fusco is also focused on advancing knowledge and practice that leads to therapies that optimize efficacy and minimize toxicity. Intrinsically, bench work and bedside practice are symbiotic, he says, and PK knowledge is especially helpful in defining therapeutic treatments and dosing regimens in pediatric populations, his area of expertise.

"I might identify a research question I feel is worthwhile to pursue but don't necessarily have the skills or knowledge to effectively answer that question. Those working at the bench may be able to do that but they may not necessarily know that question exists," states Fusco

A native Buffalonian, Fusco earned his PharmD from SPPS in 2010, deciding to focus professionally on pediatrics during his residency at the University of Maryland Medical Center.

"Pediatrics is unique. Children are considered a vulnerable population, so the amount of data we have to make evidence-based

decisions about clinical care is much more limited than it is in the adult population," he explains, adding that his residency experience also helped him better understand how critical pharmacy practice knowledge is to an interdisciplinary healthcare team.

"The pharmacist can combine information, specifically as it relates to pharmacokinetics and pharmacodynamics, with available data to make the best informed decisions about a patient's care," Fusco says commenting on his residency training.

After a year as assistant professor at the University of Maryland School of Pharmacy, Fusco joined the SPPS faculty in 2013. He has since been helping to modify the PharmD academic experience to meet new demands of delivering quality, patient-centered, cost-effective healthcare requiring interprofessional collaboration, an evolution that incorporates the expanding role of the pharmacist.

Until recently, most PharmD candidates have not been comprehensively trained to deliver care as part of an interdisciplinary team. But health professions programs are now designing academic activities based on interprofessional collaboration.

"One of the goals for interprofessional education is to help students understand each other's roles and responsibilities," says Fusco, explaining that the key is to enable students to learn about, with and from one another.

Last fall Fusco helped to design a pharmacy-nursing simulation exercise using high fidelity patient simulators at the Behling Simulation Center on the UB South Campus. Third-year PharmD students collaborated with nursing students to formulate and troubleshoot treatment in different scenarios. After the exercise, participants were debriefed by joint faculty while P2 students observed.

"It helps students gain an appreciation for what each profession can do, what expertise they can offer, and how they can use that expertise together to optimize the care of patients. We were able to open their eyes to the fact that when they are working together the care of the patient is enhanced," Fusco explains.

"We thought there certainly was a role for interprofessional education and collaborative practice in managing the opioid epidemic, so it was a great topic for our first campus-wide interprofessional education event of that magnitude. But the idea of interprofessional education really extends beyond just that topic. I think it's important to healthcare in general," Fusco says.

Fusco is a current member of the American Association of Colleges of Pharmacy, Pediatric Pharmacy Advocacy Group and American College of Clinical Pharmacy.

In 2016 he earned both the Rho Chi Teaching Excellence Award and SPPS Outstanding Teacher Award; he credits his interactive classroom technique for helping students understand the practical application of their academic knowledge.

He instructs a special populations therapeutics course that covers pediatric, geriatric and critical care, lectures on pediatric OTC drugs, and teaches students to critically evaluate literature so they can effectively educate patients, caregivers and interprofessional colleagues.

"We use patient cases and talk about specific and appropriate dosing regimens during class time and about the daily expectations of a pharmacist as it relates to clinical care. I really try to create a strong link between what I'm teaching in class and what is expected of a pediatric pharmacist in clinical practice," he says.

Fusco believes the continued advancement of academic preparation for interprofessional collaboration will bridge gaps in clinical knowledge and optimize practice for all health professions. His bedside research includes an investigation of the incidence and risk factors of acute kidney injury among critically ill children treated with combination antibiotic therapies. In December 2016, one of his students presented interim findings on the study at the American Society of Health—Systems Pharmacy Midyear Meeting.

"As new medications come out, the pharmacist will play an increasingly active role in educating others about what clinical data is telling them and how it will influence patient care," Fusco says.

"As new medications come out, the pharmacist will play an increasingly active role in educating others about what clinical data is telling them and how it will influence patient care," Fusco says.

In November 2016, Fusco worked with faculty from the Jacobs School of Medicine and Biomedical Sciences as well as the School of Public Health and Health Professions, to organize and mount a campus-wide summit, "Confronting Opioid Dependence: An Interprofessional Strategy." Nearly 900 UB students from the health professions, social work, law and management attended.

"One of the biggest benefits to being at UB is having robust and well-established programs on both the bench and bedside end of the spectrum. We leverage each other's strengths." ■

-- Jessica Thorpe, Outside the Box

[EDUCATION]

Office of Admissions and Advisement

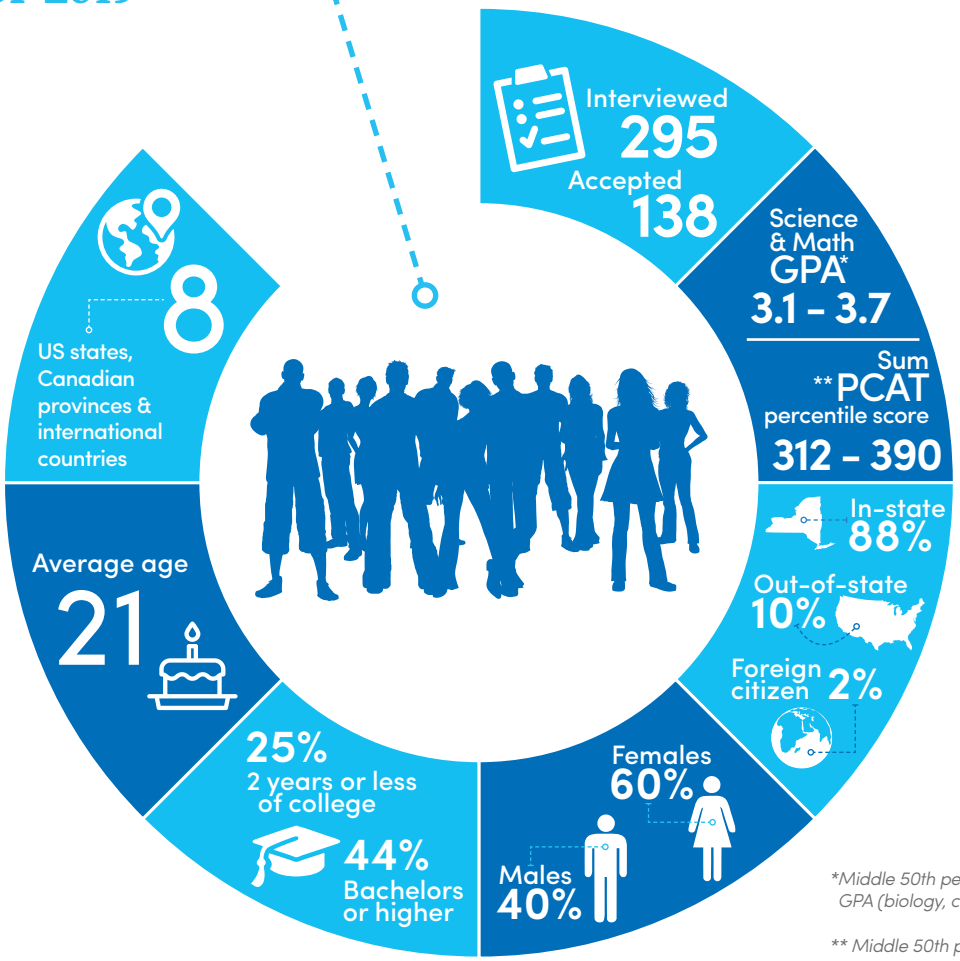
In 2015-16 we moved forward with new initiatives that improved our interactions with prospective students and allowed us to enroll the most competitive applicants.

Our efforts included hosting a New York City event for accepted pharmacy students, enhancing our 2+4 and 3+4 Educational Affiliation Agreements, and creating a Pre-Pharmacy Summer Camp for High School Students, which brought in 55 students from across the country.

To enhance our successful Dean's Ambassador Program, we added an Alumni Mentor Program, which introduces current pharmacy students to professional career opportunities in a variety of settings under the guidance of our graduates. Mentoring a student is one of the most rewarding ways to support the school, giving our graduates the ability to provide guidance, advice and ideas to students and have full discretion to determine time commitment.

Freshman pharmacy majors were offered the unique opportunity to enroll in a pharmacy Living-Learning Community. Housed in Spaulding Quadrangle in the Ellicott Complex on UB's North Campus, 50 students live in a shared-interest community, interacting with resident advisors and academic assistants enrolled in pharmacy programs. Our signature collaborative event was a Dinner with the Dean, where Dean O'Donnell joined freshmen and P3 and P4 candidates in discussing the program and field. Additional events were held during the year including interview preparation, academic advisement and tutoring sessions.

Meet the PharmD CLASS OF 2019

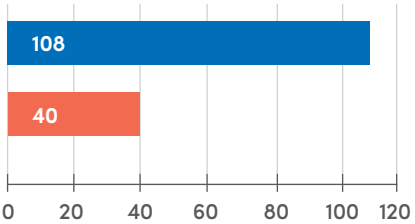


*Middle 50th percentile science & math GPA (biology, chemistry, physics, math)

** Middle 50th percentile of sum PCAT percentile score (excluding composite)

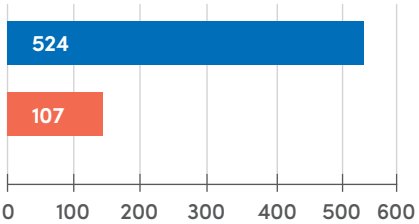
The middle 50th percentile reflects those between the 25th and 75th percentiles.

Degrees Granted



148 TOTAL

Degree Program Enrollment



631 TOTAL

2015–16 PharmD

2015–16 BS, BS/MS, MS and PhD in Pharmaceutical Sciences

Office of Continuing Pharmacy Education

Over the past year, the Office of Continuing Pharmacy Education (CPE) accredited a total of 117 continuing education programs, educating 3,631 pharmacists and health care professionals.

The CPE office offers Accreditation Council for Pharmacy Education (ACPE) accredited pharmacy and interprofessionally accredited programs via in-person, webinar and enduring opportunities serving our students, residents, fellows, faculty, preceptors, alumni, and the Western New York community.

Expansion in numerous areas of programming has taken place over the past year.

Eighty-nine cosponsored programs (offered by non-accredited entities) have received the provision of ACPE accreditation. As the number of ACPE-accredited CE providers has decreased, the SPPS CPE office provided this service to many area healthcare partners.

Opioid abuse is currently an epidemic in both New York State and across the nation, resulting in an increase in mortalities. Pharmacists can now dispense naloxone using a non-patient specific prescription (standing order). Through a collaboration with the Harm Reduction Coalition, supported by the New York State Department of Health AIDS Institute, the CPE office developed an online enduring program, "Dispensing Naloxone via a non-patient specific prescription: The Role of the Community Pharmacist." This program provides training for pharmacists to comply with the standing orders for dispensing naloxone issued by the Harm Reduction Coalition along with the Erie County Department of Health. The program was presented by Sharon Stancliff, MD, medical director of the Harm Reduction Coalition; Gale Burstein, MD, commissioner of health; Erie County Department of Health, and Denise Swiatek, PharmD, adjunct assistant professor. To date, over 500 pharmacists have received naloxone training via this program.

The NYS Department of Corrections and Community Service invited the CPE office to present at their annual symposium, educating dentists and pharmacists in the area of HIV, HCV and STD. Joshua Sawyer, clinical assistant professor, and Drew Cates, PGY2 HIV resident, presented at DOCCS locations across New York State.

The CPE office plays a lead role in providing interprofessional education for the NYS Medicaid Prescriber Education Program, a project of the SUNY/NYS Department of Health Medicaid Collaboration. In April, "An Update on Hyperlipidemia," and in October, "The Management of Nicotine Dependence: Identification, Behavioral Interventions and Treatment," were offered at the SUNY Global Center in New York City. These programs were presented by our UB Medicaid Prescriber Education Program (MPEP) academic educators.

Newly introduced lunch-hour CPE live/webinar activities were delivered by UB residents. These opportunities make it possible for pharmacists to participate via distance learning directly from their practice site.

The CPE office coordinated the 21st edition of the Comprehensive Pharmacy Law Review Series, presented by Professor Karl Fiebelkorn, RPh, MBA, senior associate dean for student, professional and community affairs. This multi-day program provides a comprehensive review of current practice laws, allowing students to prepare for the board exam.

Continuing Education Programs and Symposia

The educational programs below highlight a few of the many CE activities provided during the 2015-16 academic year.

UB CPE DEVELOPED AND DESIGNED OFFERINGS:

- Transitions of Care: Identifying Challenges and Best Practices
- Pain Management Symposium
- Medication Therapy Management Certificate Program (APhA)
- Immunization Certificate (APhA)
- Updates in Psychiatric Medication Management
- Preceptor Development programs

UB CPE COSPONSORED OFFERINGS PROVIDING PHARMACY ACCREDITATION:

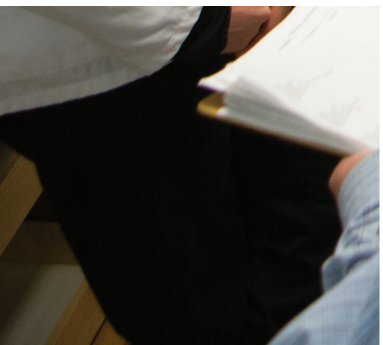
- 64 Oncology Translational Research Laboratory programs
- 28 Mt. Sinai Roosevelt Hospital HIV, HCV, and STD education programs
- Annual Roswell Park Cancer Institute Symposia on Hematology and Oncology
- Annual UBMD Primary Care Symposium











Pharmacy Practice Residents

PGY1

Marissa Censi
Community Pharmacy/Middleport Family Health

Sonja Grinfeld
Pharmacy/Erie County Medical Center

Caitlin Hoar
Pharmacy/Buffalo Medical Group

Benjamin Kematick
Community Pharmacy/Mobile Pharmacy Solutions

Esra Mustafa
Community Pharmacy/Mobile Pharmacy Solutions

Amanda Pinski
Community Pharmacy/Middleport Family Health

Samantha Will
Pharmacy/Lifetime Health

PGY2

Drew Cates
HIV Pharmacotherapy Pharmacy/Erie County Medical Center

Kimberly Mulcahy
Psychiatric Pharmacy/Buffalo Psychiatric Center

Residency Training Program

The Department of Pharmacy Practice maintained its commitment to post-graduate education via post-graduate year-1 (PGY-1) and post-graduate year-2 (PGY-2) residency training. During the 2015-16 academic year, the residency program consisted of seven PGY-1 and two PGY-2 resident training at the following sites:

- Buffalo Medical Group (PGY-1 Pharmacy)
- Buffalo Psychiatric Center (PGY-2 Psychiatry)
- Erie County Medical Center (PGY-1 Pharmacy)
- Erie County Medical Center HIV/AIDS Immunodeficiency Center (PGY-2)
- Lifetime Health Medical Group (PGY-1 Pharmacy)
- Mobile Pharmacy Solutions (PGY-1 Community Pharmacy)
- Middleport Family Health (PGY-1 Community Pharmacy)

Our mission remains consistent: to educate pharmacy residents in pharmacy practice, clinical precepting, didactic teaching, clinical research and manuscript writing; to provide patient care; and to provide services to the community at large based upon this knowledge, with the goal of training pharmacy residents to practice autonomously in a variety of settings.

In July, our Resident Teaching Certificate Program was attended by 22 residents from across Western New York. Residents may opt to earn a "Basics of Teaching" certificate by attending the two-day teaching seminar, or an "Advanced Academic Teaching" certificate by completing additional, hands-on teaching experiences throughout the year. This year, 15 of the 22 participants completed the advanced certificate, including all UB PGY-1 residents. The 12th annual Resident Project Presentation Day, held on April 16, was our largest program to date. Fifty residents from programs in Buffalo, Rochester and Syracuse presented their research to program directors, preceptors, faculty, residents and students. In addition to UB SPPS, participating programs included Kaleida Health, VA Western New York, Mercy Hospital of Buffalo, Roswell Park Cancer Institute, University of Rochester Medical Center, Upstate University Hospital, Syracuse VA Medical Center and St. Joseph's Hospital Health Center.

2015-2016 marked the second year for University Pharmacy Resident Services, Inc. (UPRS). The corporation, separate from the school and university, allows unification of our residencies under one entity and allows for streamlined pay, benefits and programs administration in an effort to better meet accreditation standards set forth by the American Society of Health Systems Pharmacists (ASHP). Three of our PGY-1 residencies (Buffalo Medical Group, Lifetime Health Medical Group and Mobile Pharmacy Solutions) were administered via UPRS during this residency year.

Pharmaceutical Sciences Postdoctoral Fellows/Associates

Sarah Cook
Mathematical models of metabolic networks for androgen metabolism and tumor growth trajectories in castrate-resistant prostate cancer

Rutwij Dave
PK/PD models

Kubra Kamisoglu
Population-based modeling to explore systematically factors contributing to differences in anti-CD20 therapy outcomes

Katherine Kay
Film approaches to microbicide evaluation: PBPK modeling of the female urogenital tract for film administration of antiretrovirals

Jun Li
Proteomic investigation of drug therapy responsive proteins and their post-translational modifications (PTMs)

Maixian Liu
Maximizing small RNA delivery with signaling peptides

Chunxia Qiao
Novel protein engineering approaches to advance the efficacy of anticancer protein therapeutics

Adolfo Quiñones-Lombraña
Pharmacogenomic determinants in cardio-oncology

Tista Roy Chaudhuri
Tumor priming strategies in conjunction with drug delivery approaches to improve therapy of pancreatic cancer

Sharad Sharma
Development of novel antibody-drug conjugates and understanding the determinants for PK/PD of these molecules

Yilixiati Xiaokaiti
Behavioral and molecular neuropharmacological study on role of phosphodiesterase in neurodegenerative disorder

Student Supporters

The following have provided generous funding for the educational training of pharmacy residents as well as trainees in all levels of pharmaceutical sciences:

PHARMACEUTICAL SCIENCES
PhD Students

Alan Barnett Fellowship Award
Robert Jones
Shunxin Lin

PhRMA Award
Robert Jones

John and Editha Kapoor Charitable Foundation
Vivaswath Ayyar

Center for Protein Therapeutics
Mark Bryniarski
Kelly Fellows
Patrick Glassman
Tommy Li
Zhe Li
Shunxin Lin
Ly Minh Nguyen
Veena Thomas
Sheryl Trueman
Michael Turner

Interdisciplinary Science and Engineering Partnership Award
Peter Bloomingdale

Mae Stone Goode Trust
Daniel Ferguson
Carrie Sanborn

American Foundation for Pharmaceutical Education Award
Jennifer (Swieck) Schneider

Institute for Strategic Enhancement of Educational Diversity Award
Vivian Rodriguez-Cruz

PHARMACY PRACTICE
Residents

Buffalo Medical Group
Caitlin Hoar

Mobile Pharmacy Solutions
Benjamin Kematick

Lifetime Health Medical Group
Samantha Will

Commencement Awards

Lilly Achievement Award
Peter Fendt

Michael E. Crawford Award
DeAnna Nigro

Eino Nelson Award
Craig Sauers

Renee A. Dederich Award
Ciera Patzke

UB School of Pharmacy & Pharmaceutical Sciences Professionalism Award
Ryan St. James

National Community Pharmacists Association Outstanding Student Member Award
Brian Bowman

The Lori Esch Memorial Award
Jeffrey Masten

The Merck Award
Adam Heiermann
Craig Sauers
Jonathan Gall

Mylan Pharmaceutical Excellence in Pharmacy Award
Sara DiTursi

David E. Guttman Award
Jung Yeon Lee

Facts and Comparisons Award of Excellence in Clinical Communication
Brenda Basile

Samuel J. Bauda Award
Jovin Panthapattu

Pharmacists Society of the State of New York Award
Mia Magliazzo

Natural Medicines Comprehensive Database Recognition Award
Craig Sauers

Teva Pharmaceuticals USA Outstanding Student Award
Patrick Rose

The Inpatient Advanced Pharmacy Practice Experience Award
Alexandra Markus

The Outpatient Advanced Pharmacy Practice Experience Award
Esther Chang

Robert M. Cooper Memorial Award
Mia Magliazzo

Pharmacists Association of Western New York Student Leadership Award
Ryan St. James

The Excellence in Pharmacogenomics Award
Adam Heiermann

Margaret C. Swisher Memorial Award
Kezia Gravesande

Western New York Society of Health-system Pharmacists Award
Ciera Patzke

Robert H. Ritz Award
Joseph Palumbo

Roy M. Barr Award
Victoria Nachar
Michael Mauri

Copel & Max Rubenstein Award in Pharmacy
Ahmed Abd-Elrahman

The Katherine Doyle Memorial Award
Shannon Rudolph

The Alfred and Erma Jones Award
Elizabeth Houck

The Excellence in Teaching Award
Robert Wahler, PharmD

A.B. Lemon Memorial Award
Jonathan Gall

The Outstanding Graduating Senior Award in Pharmaceutical Sciences
Toan Duc Nguyen

The Robert H. Gumtow Undergraduate Research Award in Pharmaceutical Sciences
Nhan Hanh Nguyen

Degree Recipients [2015 - 2016]

BACHELOR OF SCIENCE IN PHARMACEUTICAL SCIENCES

Motaz Abdallah
Farah Al Qaraghuli
Yuan-Ju Chen
Elaine Cheng
Sarah Delisle
Kemji Eke
Brenna Gallivan
Grant Harder
Elizabeth Houck
Katherin Keller
Karen Koblan
Anna Krasapolous
Jung Yeon Lee
Courtney Mamone
Nhan Hanh Nguyen
Toan Duc Nguyen
Peter Okorozo
Ji Won Paek
Nancy Song
Yassin Teysir
Qian XU
Jacinda Zhou

BACHELOR OF SCIENCE/MASTER OF SCIENCE IN PHARMACEUTICAL SCIENCES

Robert Dingman

MASTER OF SCIENCE IN PHARMACEUTICAL SCIENCES

Michael Deci
Zhe Li
Yi Ting Lien
Sihang Liu
Priyanka Madia
Shabkhaiz Masih
Jin Niu

DOCTOR OF PHARMACY

Ahmed Abd-Elrahman
Aisha Ahmad
Traci Aladeen
Dustin Anderson
James Ando
Brenda Basile
Raheal Boadi-Yeboah
Brittany Boland
Brian Bowman
Brittany Bratek
Michael Burns
Kevin Chan
Esther Chang
Yu Sun Chang
Candace Chin
Jessica Choi
Seongjun Choi
Renata Chojnacka
Gao Chong
Nichole Cipparuolo
Amanda Conenna
Danielle Davide
Sara DiTursi
Minh Nguyen Do
Truc Duong
Peter Fendt
Eric Field
Norbert Futeran
Jonathan Gall
Tavia Garvey
Jacob Gertz
Kezia Tavanee Gravesande
Sarah Gronski
Alexandra Haberman
Julia Hahn
Adam Heiermann
Emily Hull
Sarah Issa
Maria Janda
Shelby Janutol
Bing Qing Jiang
Spinel Karas
Kevin Kawalerski
Jennifer Kilinskas
Eun Tae Kim
Hyunghoo Kim
Sara Kim
Tommy Ko
Nicole Kostrzebski
Carol Leong
Lori Leung
Jenny Li
Stephanie Liang
Meghan Logue
Karen Louie
Mia Magliazzo
Katrinne Anne Mariano
Alexandra Markus
Jeffrey Masten
Michael Mauri
Erin McEwen
Andrew Mocny
Bryan Mogle
Amanda Mogul
Deborah Moss
Tyler Mullen
Victoria Nachar
Rebecca Nazaro
Kendra Nielsen
Deanna Nigro
Joseph Palumbo
Juerong Pan
Jovin Panthapattu
Bhumi Patel
Saloni Patel
Ciera Patzke
Loren Pavlovic
Carly Poccia
Kyle Polanski
Ayaj Porosh
Krishna Prajapati
Jennifer Rafferty
Andrew Reidy
Natali Reyes-Diaz
Patrick Rose
Shannon Rudolph
Craig Sauers
Robb Saunders
Michelle Schlomberg
Josh Schrader
Gunjan Shah
Thomas Sisti
Francesca Sosnowski
Ryan St. James
Brian Sultana
Joanne Tang
Anthony Torres
Ciara Trosin
Benny Vuong
Natalie Winters
Sammy Yafai
Alfred Yeung
Queenie Yu
Nahid Zaman
Senbin Zhang
Fankai Zheng
Liang Zhuo
Justin Zimmerman

DOCTOR OF PHILOSOPHY IN PHARMACEUTICAL SCIENCES

Xi Chen
Rutwij Dave
Patrick Glassman
Radha Ramakrishnan
Jennifer Schneider
Jun Wang
Xiaochen Zhao

[RESEARCH & TRAINING]

Department of Pharmaceutical Sciences

The Department of Pharmaceutical Sciences' strengths lie in biological applications for traditional small molecules, as well as biotechnology products such as monoclonal antibodies. Research focus includes pharmacokinetics, pharmacodynamics, pharmacometrics, pharmacogenomics, drug transport, drug delivery and bioanalysis.

Our department consists of a distinguished group of 14 tenure-track and two research faculty members with highly productive, largely NIH-funded research programs and corporate support, totaling over $4.5 million in external funding for 86 specific projects.

The BS undergraduate program, directed by Kathleen Boje, associate dean for academic affairs, included 37 students. The graduate program, headed by Murali Ramanathan, professor, consisted of 31 BS/MS, MS and PharmD/MS students, and 48 PhD and PharmD/PhD students. We hosted 12 postdoctoral fellows and visiting scientists. We also welcomed a new faculty member working in pharmacometrics, Robert Bies, associate professor.

Thirty-five presentations by local and visiting scientists comprised the 2015-16 Lecture and Seminar Program. Brian Houston, BSc, PhD, DSc, professor of drug metabolism and pharmaceutics, School of Pharmacy, University of Manchester, England, provided the 2015 Gerhard Levy Distinguished Lectureship in Pharmaceutical Sciences presentation, "Prediction of Human Pharmacokinetics." John Eng, medical scientist and endocrinologist at the VAPAHCS, gave the David Chu Lecture in Drug Development. Brian Booth, deputy director at the FDA (Division of Clinical Pharmacology FDA\OTS\OCP) in Washington, DC, provided the Pharmaceutics GSA Alumnus Lecture. Other notable visiting speakers included Danielle Benoit, University of Rochester; Michael King, Cornell University; Lakshmi Kotra, University of Toronto; Andrea Leone-Bay, MannKind Corporation; Monica Guzman, Weil Cornell Medical College; Andrea Edginton, University of Waterloo; and Hamid Ghandehari, University of Utah.

The Center for Protein Therapeutics (CPT), directed by Joseph Balthasar, professor and associate dean for research, was established in 2008 to advance the development of next-generation protein drugs via protein engineering and bioanalysis/proteomics, as well as PK/PD. The center provided funding for nine projects in 2015-16. The Seventh Annual CPT Symposium, held in August 2015, gathered industry sponsors with faculty and trainees to present project results.

May 2016's Buffalo Pharmacometric Workshops, attended by scientists from the pharmaceutical industry, academia and the FDA, offered courses in Pharmacokinetic-Pharmacodynamic (PK/PD) Modeling, NONMEM, Antibody PK/PD, ADAPT for Biologics, and Phoenix WinNonlin/NLME.

A new collaboration with Bristol-Myers Squibb to support the training of graduate students and postdocs was established, for 2016-17.

Our faculty members were highly prolific in their scientific accomplishments, with 119 publications issued. Ninety-five seminars and lectures were given along with 74 research posters at various scientific meetings, universities and industrial venues. Many faculty and students attended and made presentations at the American Association of Pharmaceutical Scientists (AAPS) and American Conference on Pharmacometrics (ACoP) meetings; alumni receptions were held in conjunction with these events.

Department of Pharmaceutical Sciences (continued)

- **Sathy Balu-Iyer** received the 2016 Visionary Innovator Award and a University Patent Recipient Award.
- **William Jusko** received the Doctor Honoris Causae Award from the Paris Descartes University and serves as editor-in-chief for the Journal of Pharmacokinetics and Pharmacodynamics.
- **Wojciech Krzyzanski** coordinated eight 2-3-day workshops for hands-on use of pharmacometric software, supported with donations from companies including Certera.
- **Marilyn Morris** was named SUNY Distinguished Professor and served as past President of the American Association of Pharmaceutical Scientists.
- **Donald E. Mager** completed service as past President of the International Society for Pharmacometrics and served as Visiting Professor at the Paris Descartes University teaching PK/PD.
- **Jun Qu** received an Outstanding Contribution Award for Medical Analysis in Beijing, China.
- **Rutwij Dave** was selected for the Buffalo Pharmaceutics Graduate Scholar Award, **Robert Jones** and **Shunxin Lin** received Alan Barnett Fellowship Awards, and **Robert Jones** won the Outstanding Teaching Assistant Award at our Annual Awards Banquet in December.

Department of Pharmacy Practice

Academic year 2015-2016 was a time of transition for the Department of Pharmacy Practice, marked by the departure of three junior faculty leaving for new careers. We bid fond farewells to Drs. Carolyn Hempel, Nicholas Norgard and Gauri Rao.

Scholarly achievements in the department remained robust, with faculty members authoring 53 papers in peer reviewed publications, maintaining a rate of publication that significantly exceeds the national average for pharmacy practice faculty.

The Research Pharmacy successfully expanded its presence and activity within the UB community. Integration of a clinical research pharmacist, an essential component of current and future CTRC protocols, has grown in scope and workload. This expansion of services has led to unique and productive learning environments for IPPE-3 students on elective rotation in the Research Pharmacy.

The Outpatient Research Pharmacy continues its innovation and growth in research endeavors. Website enhancement with better explanation of services has allowed the research pharmacy to integrate more fully across campus. These improvements have increased operational efficiency via intake processes, along with the hiring of a new project pharmacist. The Research Pharmacy's cross-campus impact is further evidenced by its integration into the mission of the UB research community, and development of strategic relationships with UB Clinical Translation Research Center and UB Institutional Review Board, with expanded services, suppliers and equipment.

Through the Clinical Practice Committee, chaired by Dr. William Prescott, the department is working side by side with several affiliate inpatient and ambulatory care partners to establish innovative clinical practice models to integrate our faculty and students into patient care through experiential education. In 2016, we established shared mission and vision statements with the Buffalo General Medical Center and the Erie County Medical Center Departments of Pharmacy.

The department has long had a presence and interest in international health care. Over the past several years, SUNY Distinguished Professor Gene Morse has collaborated with the University of Zimbabwe, training pharmacists as part of their effort to advance healthcare. In the past year, he has also forged a relationship with the University of the West Indies, developing a program with training opportunities for students and pharmacists that advance the practice of pharmacy in the Caribbean.

Our faculty and students continued to engage in medical mission trips, visiting Belize, the Dominican Republic and Haiti. Nationally and locally, our students collaborated with other healthcare professions caring for underserved populations in Chicago and rural Virginia, as well as Western New York. These service learning opportunities enhance our students' educational experiences while, at the same time, providing patient education through supervised health care experiences to those in need.

University Pharmacy Residency Services (UPRS) completed its second year as the primary administrator of several pharmacy residencies. Participants included residency programs funded by Independent Health (training site: Buffalo Medical Group), Lifetime Health Medical Group and Mobile Pharmacy Solutions. UPRS anticipates continued growth in residency and fellowship programs over the next several years.

Our faculty continue to demonstrate leadership in the profession. Edward Bednarczyk, department chair, was named the 2017-18 president-elect of the American Pharmacists Association, Academy of Pharmaceutical Research and Science. Robert Wahler, clinical assistant professor, was named the UB SPPS and American Association for Colleges of Pharmacy 2016 Teacher of the Year. Karl Fiebelkorn, senior associate dean, was featured in *America's Pharmacist* (the National Community Pharmacists Association official magazine) for his work in preparing the next generation of pharmacy leaders.

The Office of Continuing Pharmacy Education (CPE) was selected to offer the online program "Dispensing Naloxone via a non-patient specific prescription: The Role of the Community Pharmacist." This provided necessary training for pharmacists to comply with the standing orders for dispensing naloxone issued by the Harm Reduction Coalition and the Erie County Department of Health. A new partnership was developed with the NYS Department of Corrections and Community Service, presenting educational programs to interprofessional audiences in the areas of HIV, HCV and STD. The CPE office increased their library of enduring offerings, and offered programs to students in preparation of the NYS board exam.

Grants Awarded

JULY 1, 2015 - JUNE 30, 2016 | PHARMACEUTICAL SCIENCES

BALTHASAR, JOSEPH

Center for Protein Therapeutics
Investigation of the effects of co-administered drugs on mAb pharmacokinetics

Center for Protein Therapeutics
Examination of the effects of an "albumin tag" on the renal elimination of peptides

Center for Protein Therapeutics
Physiologically-based pharmacokinetic (PBPK) modeling of IgG 2015

F. Hoffmann-La Roche Ltd.
Investigation of the utility of LC/MS for characterization of the plasma and tissue pharmacokinetics

BALU-IYER, SATHY

National Heart Lung and Blood Institute
HL-development and pharmacology of novel lipidic rAHF and biotherapeutics

Eli Lilly and Company
Investiation of formulation variables on sc bioavailability of monoclonal antibody therapeutics

BIES, ROBERT

Trustees of Indiana University
Indiana University Center for Pediatric Pharmacology

Magee-Womens Research Institute and Foundation
Film Antiretroviral Microbicide Evaluation

Trustees of Indiana University
The efficacy and safety of a selective estrogen receptor beta agonist

Trustees of Indiana University
Pharmacometric and potential biomarker investigation in central nervous system disease such as alzheimer's and schizophrenia

Trustees of Indiana University
Pharmacometric and potential biomarker investigation for cadio-metabolic disease

BLANCO, JAVIER

National Institute of General Medical Sciences
Contribution of CBRs and AKRs to the pharmacodynamics of anthracycline drugs

JUSKO, WILLIAM

SUNY Downstate
Molecular and clinical pharmacology of retinopathy of prematurity

University of North Carolina Chapel Hill
Physiologically based pharmacokinetic model for drugs encapsulated into liposomes

National Institute of General Medical Sciences
Corticosteroid pharmacokinetics and pharmacodynamics

MAGER, DONALD

SUNY Downstate
Molecular and clinical pharmacology of retinopathy of prematurity

University of Iowa
Neonatal anemia and thrombocytopenia: pathophysiology and treatment

F. Hoffmann-La Roche Ltd.
Mechanistic modeling in hematology to systematically explore factors contributing to differences in anti-cd20 therapy outcomes and to inform optimal anti-cd20 combination strategies

Institut de Recherches Servier
Translational PK/PD of Biologics

MORRIS, MARILYN

Pharmaceutical Research & Manufactures of America
Fellowship for Robert Jones: Understanding the functional characteristics, substrate specificity, and potential applications for drug interactions with monocarboxylate transporter 6 (SLC16A5)

Jazz Pharmaceuticals Incorporated
Monocarboxylate transporters in GHB disposition

MORRIS, MARILYN (cont)

National Instiute on Drug Abuse
Gamma-hydroxybutyrate: toxicokinetics, toxicodynamics and treatment strategies

National Institute on Drug Abuse
Diversity supplement: gamma-hydroxybutyrate: toxicokinetics, toxicodynamics and treatment strategies

Center for Protein Therapeutics
Megalin/cubilin in the renal processing of peptides and proteins

Center for Protein Therapeutics
Role of FcRn, megalin and cubilin in the renal clearance and catabolism of IgG in diabetes mellitus/diabetic nephropathy

NGUYEN, JULIANE

National Institute of Biomedical Imaging and Bioengineering
Maximizing small RNA delivery with signaling peptides

National Heart, Lung, and Blood Institute
Self-replicating RNA-nanoplexes for programming monocytes to regenerate the heart

O'DONNELL, JAMES

Intra Cellular Therapies Inc.
SBIR: Development of PDE2 inhibitors for treatment of anxiety/depression in autism/schozophrenia

QU, JUN

Center for Protein Therapeutics
Investigation of the tumor and tissue dispositions of antibody-drug conjugate and target antigen with a new LC/MS-based strategy

Center for Protein Therapeutics
Investigation of the cause of low bioavailability of subcutaneously-administrated therapeutic proteins using a new LC/MS strategy to characterize the drug degradation during absorption

SUNY Downstate
Molecular and clinical pharmacology of retinopathy of prematurity

QU, JUN (cont)

Utah State University
Collaborative Research: Protein arginine methylation

Health Research Inc
The regulation of YAP oncogenic functions by PTPN14 and YAP tyrosine modification

F. Hoffmann-La Roche Ltd.
Technological advances and regulatory considerations for quantifying proteins and peptides in biological matrices using LC-MS

SHAH, DHAVAL

Center for Protein Therapeutics
Development of a transational and truly physiologically based PK (PBPK) model of brain for antibodies

Center for Protein Therapeutics
Validation of quantitative relationship between receptor expression and ADC exposure in cancer cells and tumor

Center for Protein Therapeutics
Preclinical evaluation of immune checkpoint inhibitor and bi-specific T-cell engaging molecule combination

Center for Protein Therapeutics
Quantifying immune checkpoint inhibitor (anti-PD-1 and anti-CTLA4) induced tumor infiltration of tumor infiltrating lymphocytes (TIL)

National Institute of General Medicine Sciences
Translational systems pharmacokinetic models of novel anticancer biologics

STRAUBINGER, ROBERT

Merrimack Pharmaceuticals Incorporated
M398/M310 Testing Services

National Cancer Institute
Tumor priming sequences combined with novel nanoparticle drug carriers for enhanced therapeutic efficacy in pancreatic cancer

Grants Awarded

JULY 1, 2015 - JUNE 30, 2016 | PHARMACY PRACTICE

BEDNARCZYK, EDWARD
State University of New York
SUNY/NYSDoH Pharmacy Collaborative Medicaid Initiative

CEACAREANU, ALICE
Health Research Inc
Epidemiology of breast cancer subtypes in African American women: a consortium-project 4

NYS Department of Health
Community pharmacists trained in pharmaceutical care for cancer survivors

DUNN, TERRY
ASHP Research and Education Foundation
Evaluation of health outcomes associated with a pharmacist's telephone intervention in transitions of care in an underserved population

JACOBS, DAVID
Astellas Pharma Global Development Incorporated
A multicenter characterization of the treatment of candiduria

MA, QING
National Institute of Mental Health
Antiretroviral pharmacogenomics, pharmacokinetics and toxicity in neuroAIDS

MONTE, SCOTT
Health Foundation for Western & Central NY
Improving safe medication use in elders living in rural settings

National Assoc. of Chain Drug Stores Foundation
UB SPPS & VascuScript Community pharmacy residency expansion project

VascuScript Pharmacy Incorporated
UB SPPS & VascuScript Community pharmacy residency expansion project

MORSE, GENE
University of Rochester
The University of Rochester's Clinical and Translational Science Institute

Brigham and Women's Hospital
AIDS Clinical Trials Group (ACTG) -A5329, A5334s, A5335s Lab

Brigham and Women's Hospital
ACTG Pharmacology Specialty Lab

Erie County Medical Center
Women, infants, children and youth healthcare

Erie County Medical Center
Ryan White IIIB Program—Treatment Adherence Grant

MORSE, GENE (cont)
Erie County Medical Center
The New York State Department of Health Adherence Program

Fogarty International Center
HIV Research Training Program

National Institute of Allergy & Infectious Disease
Clinical Pharmacology Quality Assurance

University of Rochester
Center for Human Experimental Therapeutics (CHET)

University of Rochester
Chronic exposure to cART predispose older HIV-infected individuals to CNS injury

University of Rochester
University of Rochester HIV/AIDS Clinical Trials Unit

University of Rochester
AIDS Clincial Trial Group (ACTG): Medication Table

University of Rochester
Developing, evaluating, and disseminating new methods and technologies to advance parkinson disease research

RAO, GAURI
Wayne State University
Optimizing Clinical Use of Polymyxin B: Teaching an Old Drug to Treat Superbugs

Monash University
New tricks for "old" drugs: PK/PD of polymyxin nonantibiotic combinations

TORNATORE, KATHLEEN
Astellas Pharma Global Development Incorporated
CYP3A5 and 3A4 haplotypes and relation to tacrolimus pharmacokinetics and adverse effects: influence of race and sex

TSUJI, BRIAN
National Institute of Allergy & Infectious Disease
Novel PK/PD strategies for polymyxin combinations against gram-negative superbugs

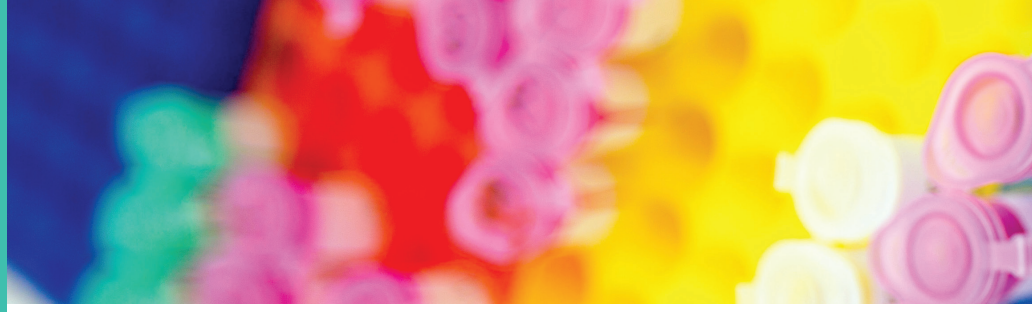
American Foundation of Pharmaceutical Education
Gateway Research Scholarship for Nicholas Smith

New Technology

INVENTION DISCLOSURE	FACULTY MEMBER
Oral tolerance using PS containing lipid particles	Balu-Iyer, Sathy
Activation of the endogenous ileal brake hormone pathway for organ regeneration and related compositions, methods of treatment, diagnostics, and regulatory systems	Schentag, Jerome
Oral tolerance using phosphoserine-containing formulations	Balu-Iyer, Sathy
Sorting-specific Exo-codes for reprogramming exosomes	Nguyen, Juliane
Medication report card for seniors	Wahler, Robert

[SCHOLARSHIP]

Intellectual Contributions



Pharmaceutical Sciences

BALTHASAR, JOSEPH P.

Qu M., An B., Shen S., Zhang M., Shen X., Duan X., Balthasar J.P., Qu J. (Rev 2016). Qualitative and quantitative characterization of protein biotherapeutics with liquid chromatography mass spectrometry. *Mass Spectrom.* doi: 10.1002/mas.21500

Glassman P.M., Chen Y., Balthasar J.P. (2015). Scale-up of a physiologically-based pharmacokinetic model to predict the disposition of monoclonal antibodies in monkeys. *J Pharmacokinet Pharmacodyn: 42*, (5) 5-540. doi: 10.1007/s10928-015-9444-y

Engler F.A., Balthasar J.P. (2016). Development and validation of an enzyme-linked immunosorbent assay for the quantification of gelonin in mouse plasma. *J Immunoassay Immunochem: 37*, (6) 6-622.

Glassman P.M., Balthasar J.P. (2016). Application of a catenary PBPK model to predict the disposition of "catch and release" anti-PCSK9 antibodies. *Int J Pharm: 505*, (1-2) 1-2-78. doi: 10.1016/j.ijpharm.2016.03.066

BALU-IYER, SATHY V.

Fathallah A. M., Chiang, M., Mishra, A., Kumar, S., Xue, L., Middaugh, R., & Balu-Iyer, S. V. (2015). The Effect of Small Oligomeric Protein Aggregates on the Immunogenicity of Intravenous and Subcutaneous Administered Antibodies. *J Pharm Sci, 104*(11), 11-3702. doi: 10.1002/jps.24592

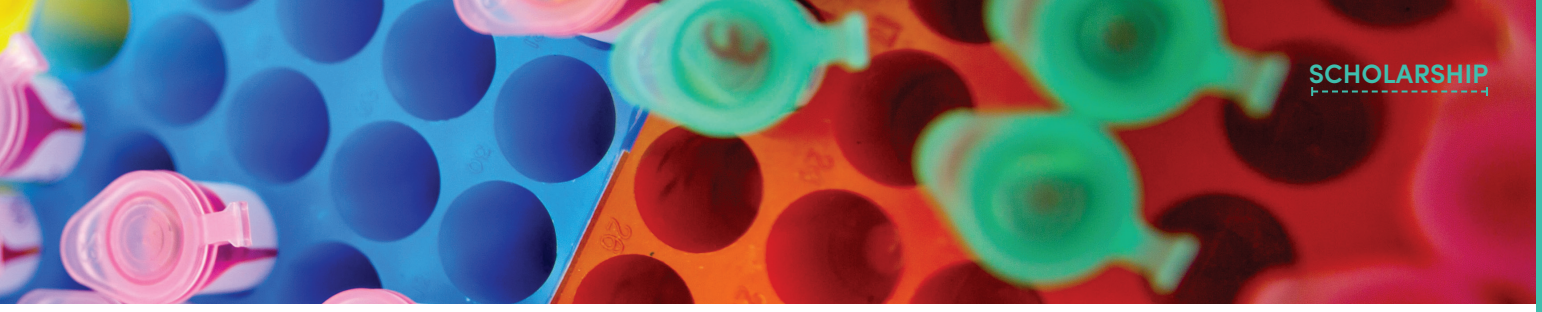
Ramakrishnan, R., Davidowitz, A., & Balu-Iyer, S. V. (2015). Exposure of FVIII in the Presence of Phosphatidyl Serine Reduces Generation of Memory B-Cells and Induces Regulatory T-Cell-Mediated Hyporesponsiveness in Hemophilia A Mice. *J Pharm Sci, 104*(8), 8-2456. doi: 10.1002/jps.24513

BIES, ROBERT R.

Velez de Mendizabal, N., Jackson, K., Eastwood, B., Swanson, S., Bender, D. M., Lowe, S., & Bies, R. R. (2015). A population PK model for citalopram and its major metabolite, N-desmethyl citalopram, in rats. *J Pharmacokinet Pharmacodyn, 42*(6), 6-733. doi: 10.1007/s10928-015-9448-7

Davies, S. J., Mulsant, B. H., Flint, A. J., Meyers, B. S., Rothschild, A. J., Whyte, E. M., Kirshner, M. M., Sorisio, D., Pollock, B. G., & Bies, R. R. (2015). The Impact of Sertraline Co-Administration on the Pharmacokinetics of Olanzapine: A Population Pharmacokinetic Analysis of the STOP-PD. *Clin Pharmacokinet, 54*(11), 1161-1168. doi: 10.1007/s40262-015-0275-1

Tsuboi, T., Bies, R. R., Suzuki, T., Takeuchi, H., Nakajima, S., Graff-Guerrero, A., Mamo, D. C., Caravaggio, F., Plitman, E., Mimura, M., Pollock, B. G., & Uchida, H. (2015). Predicting Plasma Olanzapine Concentration Following a Change in Dosage: A Population Pharmacokinetic Study. *Pharmacopsychiatry, 48*(7), 286-291. doi: 10.1055/s-0035-1565070



BIES, ROBERT R. (continued)

Akil, A., Zhang, Q., Mumaw, C. L., Raiker, N., Yu, J., Velez de Mendizabal, N., Haneline, L. S., Robertson, K. A., Skiles, J., Diaz-Ricart, M., Carreras, E., Renbarger, J., Hanash, S., Bies, R. R., & Paczesny, S. (2015). Biomarkers for Diagnosis and Prognosis of Sinusoidal Obstruction Syndrome after Hematopoietic Cell Transplantation. *Biol Blood Marrow Transplant, 21*(10), 1739-1745. doi: 10.1016/j.bbmt.2015.07.004

Sawyer, M. B., Pituskin, E., Damaraju, S., Bies, R. R., Vos, L. J., Prado, C. M., Kuzma, M., Scarfe, A. G., Clemons, M., Tonkin, K., Au, H. J., Koski, S., Joy, A. A., Smylie, M., King, K., Carandang, D., Damaraju, V. L., Hanson, J., Cass, C. E., & Mackey, J. R. (2015). A Uridine Glucuronosyltransferase 2B7 Polymorphism Predicts Epirubicin Clearance and Outcomes in Early-Stage Breast Cancer. *Clin Breast Cancer, 16*(2):139-144. doi: 10.1016/j.clbc.2015.09.006

Nakajima, S., Uchida, H., Bies, R. R., Caravaggio, F., Suzuki, T., Plitman, E., Mar, W., Gerretsen, P., Pollock, B. G., Mulsant, B. H., Mamo, D. C., & Graff-Guerrero, A. (2015). Dopamine D2/3 Receptor Occupancy Following Dose Reduction Is Predictable With Minimal Plasma Antipsychotic Concentrations: An Open-Label Clinical Trial. *Schizophr Bull*. doi.org/10.1093/schbul/sbv106

Yang, Q. J., Jerath, A., Bies, R. R., Wasowicz, M., & Pang, K. S. (2015). Pharmacokinetic modeling of tranexamic acid for patients undergoing cardiac surgery with normal renal function and model simulations for patients with renal impairment. *Biopharm Drug Dispos, 36*(5), 294-307.

BLANCO, JAVIER G.

Hefti, E., & Blanco, J. G. (2016). Pharmacokinetics of Chemotherapeutic Drugs in Pediatric Patients With Down Syndrome and Leukemia. *J Pediatr Hematol Oncol.* doi: 10.1097/MPH.0000000000000540

Hoefer, C. C., Blair, R. H., & Blanco, J. G. (2016). Development of a CART Model to Predict the Synthesis of Cardiotoxic Daunorubicinol in Heart Tissue Samples From Donors With and Without Down Syndrome. *J Pharm Sci.* doi: 10.1016/j.xphs.2016.03.01

Wang, X., Sun, C. L., Quiñones-Lombraña, A., Singh, P., Landier, W., Hageman, L., Mather, M., Rotter, J. I., Taylor, K. D., Chen, Y. I., Armenian, S. H., Winick, N., Ginsberg, J. P., Neglia. J, P., Oeffinger, K. C., Castellino, S. M., Dreyer, Z. E. Hudson M. M., Robison, L. L., Blanco J. G., & Bhatia, S. (2016). CELF4 Variant and Anthracycline-Related Cardiomyopathy: A Children's Oncology Group Genome-Wide Association Study. *J Clin Oncol.* Doi:10.1200/JCO.2015.63.4550

Hefti, E., & Blanco, J. G. (2016). Documenting Pharmacogenomic Testing with CPT Codes. *J AHIMA 2016: 87*, (1) 56-59.

JUSKO, WILLIAM J.

Jusko, W. J. Foundations of Pharmacodynamic Systems Analysis (2016). Systems Pharmacology and Pharmacodynamics, *AAPS Advances in the Pharmaceutical Sciences Series* 23 -175.

Chen, X., Jiang, X., Jusko, W. J., Zhou, H., & Wang, W. (2016). Minimal physiologically based pharmacokinetic (mPBPK) model for a monoclonal antibody against interleukin-6 in mice with collagen-induced arthritis. *J Pharmacokinet Pharmacodyn, 43*(3), 3-304. doi: 10.1007/s10928-016-9472-2

Miao, X., Koch, G., Straubinger, R. M., & Jusko, W. J. (2016). Pharmacodynamic modeling of combined chemotherapeutic effects predicts synergistic activity of gemcitabine and trabectedin in pancreatic cancer cells. *Cancer Chemother Pharmacol, 77*(1), 1-193.

Yoo, H., Iirola, T., Vilo, S., Manner, T., Aantaa, R., Lahtinen, M., Scheinin, M., Olkkola, K. T., & Jusko, W. J. (2016). Mechanism-based population pharmacokinetic and pharmacodynamic modeling of intravenous and intranasal dexmedetomidine in healthy subjects. *Eur J Clin Pharmacol, 71*(10), 10-1207. doi: 10.1007/s00228-015-1913-0

Fung, H. L., & Jusko, W. J. (2015). Perspectives on the history and scientific contributions of Gerhard Levy. *J Pharmacokinet Pharmacodyn, 42*(5), 5-446. doi: 10.1007/s10928-015-9442-0

Zhu, X., Straubinger, R. M., & Jusko, W. J. (2015). Mechanism-based mathematical modeling of combined gemcitabine and birinapant in pancreatic cancer cells. *J Pharmacokinet Pharmacodyn, 42*(5), 5-496.

Zhao, J., Cao, Y., & Jusko, W. J. (2015). Across-Species Scaling of Monoclonal Antibody Pharmacokinetics Using a Minimal PBPK Model. *Pharm Res, 32*(10), 10-3281. doi: 10.1007/s11095-015-1703-5

Lon, H. K., DuBois, D. C., Earp, J. C., Almon, R. R., & Jusko, W. J. (2015). Modeling effects of dexamethasone on disease progression of bone mineral density in collagen-induced arthritic rats. *Pharmacol Res Perspect, 3*(5), 5-00169. doi: 10.1002/prp2.169

Estepp, J. H., Melloni, C., Thornburg, C. D., Wiczling, P., Rogers, Z., Rothman, J. A., Green, N. S., Liem, R., Brandow, A. M., Crary, S. E., Howard, T. H., Morris, M. H., Lewandowski, A., Garg, U., Jusko, W. J., & Neville, K. A. (2015). Pharmacokinetics and bioequivalence of a liquid formulation of hydroxyurea in children with sickle cell anemia. *J Clin Pharmacol.* doi: 10.1002/jcph.598

Xue, B., Nie, J., Wang, X., DuBois, D. C., Jusko, W. J., & Almon, R. R. (2015). Effects of High Fat Feeding on Adipose Tissue Gene Expression in Diabetic Goto-Kakizaki Rats. *Gene Regul Syst Bio, 9*, 15-26. doi: 10.4137/GRSB.S25172

KRZYZANSKI, WOJCIECH

Krzyzanski, W. (2016). Direct, Indirect, and Signal Transduction Response. 209.

Krzyzanski, W., Xiao, J. J., Sasu, B., Hinkle, B., Perez-Ruixo, J. J. (2016). Pharmacodynamic Model of Hepcidin Regulation of Iron Homeostasis in Cynomolgus Monkeys. *AAPS J, 18*(3), 3-727. doi: 10.1208/s12248-016-9886-1

Krzyzanski, W., Perez-Ruixo, J. J, Harrold, J. (2015). Pharmacodynamic model for chemoradiotherapy-induced thrombocytopenia in mice. *J Pharmacokinet Pharmacodyn, 42*(6), 6-720.

Krzyzanski, W. (2015). Pharmacodynamic models of age-structured cell populations. *J Pharmacokinet Pharmacodyn 42*(5), 5-589

Woot de Trixhe, X., Krzyzanski, W., De Ridder, F., Vermeulen, A. (2015). vRNA structured population model for Hepatitis C Virus dynamics. *J Theor Biol, 378*, 1-11. doi: 10.1016/j.jtbi.2015.04.017

MORRIS, MARILYN E.

Chadha, G. S., & Morris, M. E. (2015). Effect of Type 2 Diabetes Mellitus and Diabetic Nephropathy on IgG Pharmacokinetics and Subcutaneous Bioavailability in the Rat. *AAPS J, 17*(4), 4-975. doi: 10.1208/s12248-015-9771-3

Chadha, G. S., & Morris, M. E. (2015). An Extended Minimal Physiologically Based Pharmacokinetic Model: Evaluation of Type II Diabetes Mellitus and Diabetic Nephropathy on Human IgG Pharmacokinetics in Rats. *AAPS J, 17*(6), 6-1474. doi: 10.1208/s12248-015-9810-0

Dave, R. A. & Morris, M. E. (2015). Semi-mechanistic kidney model incorporating physiologically-relevant fluid reabsorption and transporter-mediated renal reabsorption: pharmacokinetics of β^3-hydroxybutyric acid and L-lactate in rats. *J Pharmacokinet Pharmacodyn, 42*(5), 5-513. doi: 10.1007/s10928-015-9441-1

Chadha, G. A. & Morris, M. E. (2016). Monoclonal antibody pharmacokinetics in type 2 diabetes mellitus and diabetic nephropathy. *Curr Pharmacol Rep, 2*(2), 2-56.

NGUYEN, JULIANE

Ferguson, S., & Nguyen, J. (2016). Exosomes as therapeutics: The implications of molecular composition and exosomal heterogeneity. *Journal of Controlled Release*. doi: 10.1016/j.jconrel.2016.02.037

Nguyen, J., Cooke, J. R., Ellis, J. A., Deci, M., Emala, C. W., Bruce, J. N., Bigio, I. J., Straubinger, R. M., & Joshi, S. (2016). Cationizable lipid micelles as vehicles for intraarterial glioma treatment. *J Neurooncol*. doi: 10.1007/s11060-016-2088-y

Heck, S., Nguyen, J., Le, D. D., Bals, R., & Dinh, Q. T. (2016). Pharmacological Therapy of Bronchial Asthma: The Role of Biologicals. *Int Arch Allergy Immunol, 168*(4), 4-252.

NGUYEN, JULIANE (continued)

Beck-Broichsitter, M., Samsonova, O., Nguyen, J., Schmehl, T., Seeger, W., & Kissel, T. (2016). Influence of amine-modified poly(vinyl alcohol)s on vibrating-membrane nebulizer performance and lung toxicity. *Eur J Pharm Sci*. doi: 10.1016/j.ejps.2016.02.023

O'DONNELL, JAMES M.

Wang, G., Chen, L., Pan, X., Chen, J., Wang, L., Wang, W., Cheng, R., Wu, F., Feng, X., Yu, Y., Zhang, H. T., O'Donnell, J. M., & Xu, Y. (2016). The effect of resveratrol on beta amyloid-induced memory impairment involves inhibition of phosphodiesterase-4 related signaling. *Oncotarget*. doi: 10.18632/oncotarget.8041

Lueptow, L. M., Zhan, C. G., O'Donnell, J. M. (2016). Cyclic GMP-mediated memory enhancement in the object recognition test by inhibitors of phosphodiesterase-2 in mice. *Psychopharmacology (Berl), 233*(3), 3-456. doi: 10.1007/s00213-015-4129-1

Wang, Z. Z., Yang, W. X., Zhang, Y., Zhao, N., Zhang, Y. Z., Liu, Y. Q., Xu, Y., Wilson, S. P., O'Donnell, J. M., Zhang, H. T., & Li, Y. F. (2015). Phosphodiesterase-4D Knock-down in the Prefrontal Cortex Alleviates Chronic Unpredictable Stress-Induced Depressive-Like Behaviors and Memory Deficits in Mice. *Sci Rep, 5*, 11332. doi: 10.1038/srep11332

QU, JUN

Shen, S., Li, J., Hilchey, S., Shen, X., Tu, C., Qiu, X., Ng, A., Ghaemmaghami, S., Wu, H., Zand, M.S., & Qu, J. (2016). Ion-Current-Based Temporal Proteomic Profiling of Influenza-A-Virus-Infected Mouse Lungs Revealed Underlying Mechanisms of Altered Integrity of the Lung Microvascular Barrier. *J Proteome Res*. doi: 10.1021/acs.jproteome.5b00927

Shen, S., Jiang, X., Li, J., Straubinger, R. M., Suarez, M., Tu, C., Duan, X., Thompson, A. C., & Qu, J. (2016). Large-scale, ion-current-based proteomic investigation of the rat striatal proteome in a model of short- and long-term cocaine withdrawal. *J Proteome Res, 15*(5), 5-1716. doi: 10.1021/acs.jproteome.6b00137

Zhang T., Shen S., Qu J., & Ghaemmaghami, S. (2016). Global Analysis of Cellular Protein Flux Quantifies the Selectivity of Basal Autophagy. *Cell Report, 14*(10), 10-2439. doi: 10.1016/j.celrep.2016.02.040

Yuan, X., Cao, J., He, X., Serra, R., Qu, J., Cao, X., & Yang, S. (2016). Ciliary IFT80 balances canonical versus non-canonical hedgehog signaling for osteoblast differentiation. *Nat Commun*. doi: 10.1038/ncomms11024

QU, JUN (continued)

Qu, M., An, B., Shen, S., Zhang, M., Shen, X., Duan, X., Balthasar, J. P., & Qu, J. (2016). Qualitative and quantitative characterization of protein biotherapeutics with liquid chromatography mass spectrometry. *Mass Spectrom Rev*. doi: 10.1002/mas.21500

Tu, C., Sheng, Q., Li, J., Ma, D., Shen, X., Wang, X., Shyr, Y., Yi, Z., & Qu, J. (2015). Optimization of Search Engines and Postprocessing Approaches to Maximize Peptide and Protein Identification for High-Resolution Mass Data. *J Proteome Res, 14*(11), 11-4673. doi: 10.1021/acs.jproteome.5b00536

Shen, X., Nair, B., Mahajan, S. D., Jiang, X., Li, J., Shen, S., Tu, C., Hsiao, C. B., Schwartz, S. A., & Qu, J. (2015). New Insights into the Disease Progression Control Mechanisms by Comparing Long-Term-Nonprogressors versus Normal-Progressors among HIV-1-Positive Patients Using an Ion Current-Based MS1 Proteomic Profiling. *J Proteome Res*. doi: 10.1021/acs.jproteome.5b00621

Shen, X., Hu, Q., Li, J., Wang, J., & Qu, J. (2015). Experimental Null Method to Guide the Development of Technical Procedures and to Control False-Positive Discovery in Quantitative Proteomics. *J Proteome Res, 14*(10), 10-4157. doi: 10.1021/acs.jproteome.5b00200

RAMANATHAN, MURALI

Fellows, K., Uher, T., Browne, R. W., Weinstock-Guttman, B., Horakova, D., Posova, H., Vaneckova, M., Seidl, Z., Krasensky, J., Tyblova, M., Havrdova, E., Zivadinov, R., & Ramanathan, M. (2015). Protective associations of HDL with blood-brain barrier injury in multiple sclerosis patients. *J Lipid Res, 56*(10), 10-2018. doi: 10.1194/jlr.M060970

Fellows, K., Stoneking, C. J., & Ramanathan, M. (2015) Bayesian population modeling of drug dosing adherence. *J Pharmacokinet Pharmacodyn, 42*(5), 5-525. doi: 10.1007/s10928-015-9439-8

Alexander, J. S., Chervenak, R., Weinstock-Guttman, B., Tsunoda, I., Ramanathan, M., Martinez, N., Omura, S., Sato, F., Chaitanya, G. V., Minagar, A., McGee, J., Jennings, M. H., Monceaux, C., Becker, F., Cvek, U., Trutschl, M., Zivadinov, R. (2015). Blood circulating microparticle species in relapsing-remitting and secondary progressive multiple sclerosis. A case-control, cross sectional study with conventional MRI and advanced iron content imaging outcomes. *J Neurol Sci, 355*(1-2) 84-89. doi: 10.1016/j.jns.2015.05.027

Schwartz, C. E., Ayandeh, A., Ramanathan, M., Benedict, R., Dwyer, M. G., Weinstock-Guttman, B., & Zivadinov, R. (2015). Reserve-building activities in multiple sclerosis patients and healthy controls: a descriptive study. *BMC Neurol, 15*, 135. doi: 10.1186/s12883-015-0395-0

Sanai, S. A., Saini, V., Benedict, R. H., Zivadinov, R., Teter, B. E., Ramanathan, M., & Weinstock-Guttman, B. (2016). Aging and multiple sclerosis. *Mult Scler 2016: 22,*(6) 6-725. doi: 10.1177/1352458516634871

RAMANATHAN, MURALI (continued)

Uher, T., Horakova, D., Tyblova, M., Zeman, D., Krasulova, E., Mrazova, K., Seidl, Z., Vaneckova, M., Krasensky, J., Weinstock-Guttman, B., Ramanathan, M., Havrdova, E., & Zivadinov, R. (2016). Increased albumin quotient (QAlb) in patients after first clinical event suggestive of multiple sclerosis is associated with development of brain atrophy and greater disability 48 months later. *Mult Scler, 22*(6), 6-781. doi: 10.1177/1352458515601903

Zivadinov, R., Cerza, N., Hagemeier, J., Carl, E., Badgett, D., Ramasamy, D. P., Weinstock-Guttman, B., & Ramanathan, M. (2016). Humoral response to EBV is associated with cortical atrophy and lesion burden in patients with MS. *Neurol Neuroimmunol Neuroinflamm, 3*(1), 1-190. doi: 10.1212/NXI.0000000000000190

Fellows, K., Uher, T., Browne, R. W., Weinstock-Guttman, B., Horakova, D., Posova, H., Vaneckova, M., Seidl, Z., Krasensky, J., Tyblova, M., Havrdova, E., Zivadinov, R., & Ramanathan, M. (2015). Protective Associations of HDL with Blood Brain Barrier Injury in Multiple Sclerosis Patients. *J Lipid Res*. doi: 10.1194/jlr.M060970

Magner, W. J., Weinstock-Guttman, B., Rho, M., Hojnacki, D., Ghazi, R., Ramanathan, M., Tomasi, T. B., & Hojnacki, D. W. (2016). Dicer and microRNA expression in multiple sclerosis and response to interferon therapy. *J Neuroimmunol, 292*, 68-78. doi: 10.1016/j.jneuroim.2016.01.009

Zivadinov, R., Raj, B., Ramanathan, M., Teter, B., Durfee, J., Dwyer, M. G., Bergsland, N., Kolb, C., Hojnacki, D., Benedict, R. H., Weinstock-Guttman, B., & Hojnacki, D. W. (2016). Autoimmune Comorbidities Are Associated with Brain Injury in Multiple Sclerosis. *AJNR Am J Neuroradiol*. doi: 10.3174/ajnr.A4681

Kappus, N., Weinstock-Guttman, B., Hagemeier, J., Kennedy, C., Melia, R., Carl, E., Ramasamy, D. P., Cherneva, M., Durfee, J., Bergsland, N., Dwyer, M. G., Kolb, C., Hojnacki, D., Ramanathan, M., Zivadinov, R., & Hojnacki, D. W. (2016). Cardiovascular risk factors are associated with increased lesion burden and brain atrophy in multiple sclerosis. *J Neurol Neurosurg Psychiatry, 87*(2), 2-187. doi: 10.1136/jnnp-2014-310051

SHAH, DHAVALKUMAR K.

Khot, A., Sharma, S., & Shah, D. K. (2015). Integration of bioanalytical measurements using PK/PD modeling and simulation: implications for antibody-drug conjugate development. *Bioanalysis, 7*(13), 13-1648. doi: 10.4155/bio.15.85

STRAUBINGER, ROBERT M.

Joshi, S., Cooke, J. R., Chan, D. K., Ellis, J. A., Hossain, S. S., Singh-Moon, R. P., Wang, M., Bigio, I. J., Bruce, J. N., & Straubinger, R. M. (2016). Liposome size and charge optimization for intraarterial delivery to gliomas. *Drug Deliv Transl Res, 6*(3), 3-233. doi: 10.1007/s13346-016-0294-y

Shen, S., Jiang, X., Li, J., Straubinger R. M, Suarez, M., Tu C., Duan, X., Thompson, A. C., & Qu J. (2016). Large-scale, ion-current-based proteomic investigation of the rat striatal proteome in a model of short- and long-term cocaine withdrawal. *J Proteome Res, 15*(5) 5-1716. doi: 10.1021/acs.jproteome.6b00137

Miao, X., Koch, G., Straubinger, R. M., & Jusko, W. J. (2016). Pharmacodynamic modeling of combined chemotherapeutic effects predicts synergistic activity of gemcitabine and trabectedin in pancreatic cancer cells. *Cancer Chemother Pharmacol, 77*(1), 1-193. doi: 10.1007/s00280-015-2907-4

Zhu, X., Straubinger, R. M., Jusko, W. J. (2015). Mechanism-based mathematical modeling of combined gemcitabine and birinapant in pancreatic cancer cells. *J Pharmacokinet Pharmacodyn, 42*(5), 5-496. doi: 10.1007/s10928-015-9429-x

Nguyen, J., Cooke, J. R., Ellis, J. A., Deci, M., Emala, C. W., Bruce, J. N., Bigio, I. J., Straubinger, R. M., Joshi, S. (2016). Cationizable lipid micelles as vehicles for intraarterial glioma treatment. *J Neurooncol.* doi: 10.1007/s11060-016-2088-y

Roy Chaudhuri, T., Straubinger, N. L., Pitoniak, R. F., Hylander, B. L., Repasky, E. A., Ma, W. W., & Straubinger, R. M. (2016). Tumor-priming Smoothened inhibitor enhances deposition and efficacy of cytotoxic nanoparticles in a pancreatic cancer model. *Mol Cancer Ther, 15*(1), 1-93. doi: 10.1158/1535-7163.MCT-15-0602

TU, CHENGJIAN

Shen, S., Jiang, X., Li, J., Straubinger, R. M., Suarez, M., Tu C., Duan, X., Thompson, A. C., & Qu J. (2016). Large-scale, ion-current-based proteomic investigation of the rat striatal proteome in a model of short- and long-term cocaine withdrawal. *J Proteome Res, 15*(5), 5-1716. doi: 10.1021/acs.jproteome.6b00137

Shen, S., Li, J., Hilchey, S., Shen, X., Tu, C., Qiu, X., Ng, A., Ghaemmaghami, S., Wu, H., Zand, M. S., & Qu, J. (2015). Ion-Current-Based Temporal Proteomic Profiling of Influenza-A-Virus-Infected Mouse Lungs Revealed Underlying Mechanisms of Altered Integrity of the Lung Microvascular Barrier. *J Proteome Res, 15*(2), 2-553. doi: 10.1021/acs.jproteome.5b00927

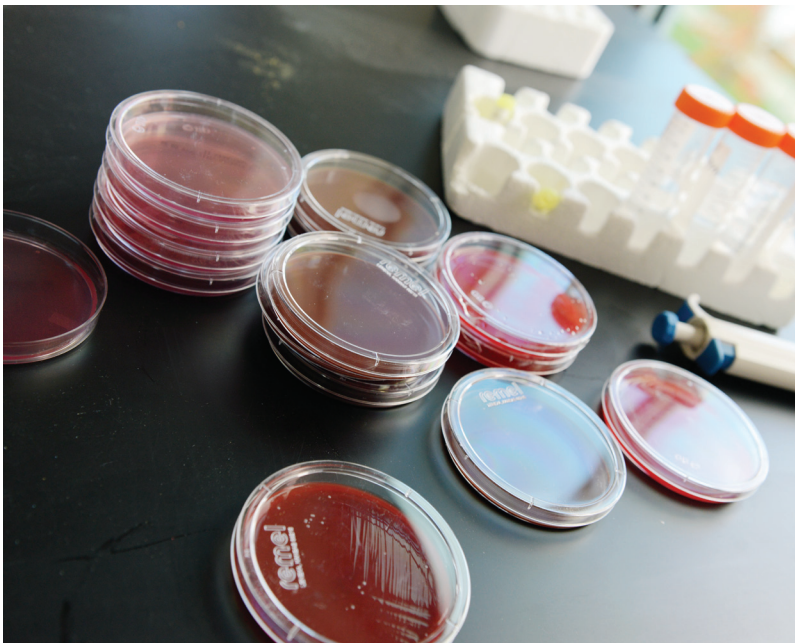
Tu, C., Sheng, Q., Li, J., Ma, D., Shen, X., Wang, X., Shyr, Y., Yi, Z., & Qu, J. (2015). Optimization of Search Engines and Postprocessing Approaches to Maximize Peptide and Protein Identification for High-Resolution Mass Data. *J Proteome Res, 14*(11), 11-4673. doi: 10.1021/acs.jproteome.5b00536

Shen, X., Nair, B., Mahajan, S. D., Jiang, X., Li, J., Shen, S., Tu, C., Hsiao, C. B., Schwartz, S. A., & Qu, J. (2015). New Insights into the Disease Progression Control Mechanisms by Comparing Long-Term-Nonprogressors versus Normal-Progressors among HIV-1-Positive Patients Using an Ion Current-Based MS1 Proteomic Profiling. *J Proteome Res.* doi: 10.1021/acs.jproteome.5b00621

XU, YING

Wang, G., Chen, L., Pan, X., Chen, J., Wang, L., Wang, W., Cheng, R., Wu, F., Feng, X., Yu, Y., Zhang, H. T., O'Donnell, J. M., & Xu, Y. (2016). The effect of resveratrol on beta amyloid-induced memory impairment involves inhibition of phosphodiesterase-4 related signaling. *Oncotarget.* doi: 10.18632/oncotarget.8041

Wang, Z. Z., Yang, W. X., Zhang, Y., Zhao, N., Zhang, Y. Z., Liu, Y. Q., Xu, Y., Wilson, S. P., O'Donnell, J. M., Zhang, H. T., & Li, Y. F. (2015). Phosphodiesterase-4D Knock-down in the Prefrontal Cortex Alleviates Chronic Unpredictable Stress-Induced Depressive-Like Behaviors and Memory Deficits in Mice. *Sci Rep, 5*, -11332. doi: 10.1038/srep11332



Pharmacy Practice

ALBANESE, NICOLE P.

Slazak, E. M., Fodero, K. E., & Albanese, N. P. (2015). Student Pharmacist Perceptions of a Behind-The-Counter Class of Medications. *Journal of Pharmacy Practice.* doi: 10.1177/0897190015612594

BRODY, PETER M.

Monte, S., Passafiume, S. N., Kufel, W. D., Comerford, P., Trzewieczynski, D. P., Andrus, K., & Brody, P. M. (2016). Pharmacist home visits: A 1-year experience from a community pharmacy. *Journal of the American Pharmacists Assocation (JAPhA), 56*(1), 1-72. doi: 10.1016/j.japh.2015.11.002

CEACAREANU, ALICE C.

Nimako, G. K., Wintrob, Z. A., Sulik, D. A., Donato, J. L., Ceacareanu, A. C. (2016). Synergistic Benefit of Statin and Metformin in Gastrointestinal Malignancies. *J Pharm Pract.* doi: 10.1177/0897190015627255

DIFRANCESCO, ROBIN

Bednasz, C., Luque, A. E., Zingman, B. S., Fischl, M. A., Gripshover, B. M., Venuto, C. S., Gu, J., Feng, Z., DiFrancesco, R., Morse, G. D., Ma, Q. (2016). Lipid-lowering therapy in HIV-infected patients: relationship with antiretroviral agents and impact of substance-related disorders. *Curr Vasc Pharmacol, 4*(3), 280-287. doi: 10.2174/157016111466616010615165 2

FUSCO, NICHOLAS M.

Fusco, N., Gonzales, J., Yeung, S. Y., & Fusco, N. M. (2015). Evaluation of the treatment of diabetic ketoacidosis in the medical intensive care unit. *Am J Health Syst Pharm 2015: 72,*(23 Su) 23 Su-182. doi: 10.2146/sp150028

JACOBS, DAVID M.

Abboud, C. S., Monteiro, J., Stryjewski, M. E., Zandonadi, E. C., Barbosa, V., Dantas, D., Sousa, E. E., Fonseca, M. J., Jacobs, D. M., Pignatari, A. C., Kiffer, C., & Rao, G. G. (2016). Post-surgical mediastinitis due to carbapenem-resistant Enterobacteriaceae: Clinical, epidemiological and survival characteristics. *Int J Antimicrob Agents, 47*(5), 5-390. doi: 10.1016/j.ijantimicag.2016.02.015

Caruana, J. A., Monte, S. V., Jacobs, D. M., Voytovich, C., Ghanim, H., & Dandona, P. (2015). Distal small bowel bypass for weight regain after gastric bypass: safety and efficacy threshold occurs at <70% bypass. *Surg Obes Relat Dis, 11*(6), 6-1255. doi: 10.1016/j.soard.2015.08.001

KRAJEWSKI, MICHAEL P.

Fodero, K. E., Horey, A. L., Krajewski, M. P., Ruh, C. A., Sellick, J. A., Mergenhagen, K. A., & Sellick, Jr J. A. (2016). Impact of an Antimicrobial Stewardship Program on Patient Safety in Veterans Prescribed Vancomycin. *Clin Ther.* doi: 10.1016/j.clinthera.2016.01.001

MA, QING

Ma, Q. Long-term efavirenz use is associated with worse neurocognitive functioning in HIV-infected patients. *J Neurovirol 2016: 22*(2), 2-178. doi: 10.1007/s13365-015-0382-7

Bednasz, C., Luque, A. E., Zingman, B. S., Fischl, M. A., Gripshover, B. M., Venuto, C. S., Gu, J., Feng, Z., DiFrancesco, R., Morse, G. D., & Ma, Q. (2016). Lipid-lowering therapy in HIV-infected patients: relationship with antiretroviral agents and impact of substance-related disorders. *Curr Vasc Pharmacol.* doi: 10.2174/157016111466616010615165 2

MAPONGA, CHARLES C.

Makita-Chingombe, F., Kutscher, H. L., DiTursi, S. L., Morse, G. D., & Maponga, C. C. (2016). Poly(lactic-co-glycolic) Acid-Chitosan Dual Loaded Nanoparticles for Antiretroviral Nanoformulations. *J Drug Deliv.* doi: 10.1155/2016/3810175

MEANEY, CALVIN J.

Woodruff, A. E., Meaney, C. J., Hansen, E. A., & Prescott, G. M. (2015). Azithromycin-Induced, Biopsy-Proven Acute Interstitial Nephritis in an Adult Successfully Treated with Low-Dose Corticosteroids. *Pharmacotherapy, 35*(11), 169-174. doi: 10.1002/phar.1660

Lenhard, J. R., Brown, T., Rybak, M. J., Meaney, C. J., Norgard, N. B., Bulman, Z. P., Brazeau, D., Gill, S. R., & Tsuji, B. T. (2015). Sequential Evolution of Vancomycin-Intermediate Resistance Alters Virulence in Staphylococcus aureus: PK/PD Targets for Vancomycin Exposure. *Antimicrob Agents Chemother.* doi: 10.1128/AAC.02657-15

Venuto, R. C., Meaney, C. J., Chang, S., Leca, N., Consiglio, J. D., Wilding, G. E., Brazeau, D., Gundroo, A., Nainani, N., Morse, S. E., Cooper, L. M., & Tornatore, K. M. (2015). Association of Extrarenal Adverse Effects of Posttransplant Immunosuppression With Sex and ABCB1 Haplotypes. *Medicine (Baltimore), 94*(37), 37-1315. doi: 10.1097/MD.0000000000001315

Woodruff, A. E., Meaney, C. J., Hansen, E. A., & Prescott, G. M. (2015). Azithromycin-Induced, Biopsy-Proven Acute Interstitial Nephritis in an Adult Successfully Treated with Low-Dose Corticosteroids. *Pharmacotherapy, 35*(11), 11-174. doi: 10.1002/phar.1660

MONTE, SCOTT V.

Monte, S., Passafiume, S. N., Kufel, W. D., Comerford, P., Trzewieczynski, D. P., Andrus, K., & Brody, P. M. (2016). Pharmacist home visits: A 1-year experience from a community pharmacy. *Journal of the American Pharmacists Assocation (JAPhA), 56*(1) 1-72. doi: 10.1016/j.japh.2015.11.002

Caruana, J. A., Monte, S. V., Jacobs, D. M., Voytovich, C., Ghanim, H., & Dandona, P. (2015). Distal small bowel bypass for weight regain after gastric bypass: safety and efficacy threshold occurs at <70% bypass. *Surg Obes Relat Dis, 11*(6), 6-1255. doi: 10.1016/j.soard.2015.08.001

MORSE, GENE D.

Koval, C. E., Khanna, A., Pallotta, S., Spinner, M., Taege, A., Eghtesad, B., Fujiki, M., Hashimoto, K., Rodriguez, B., Morse, G. D., Bennett, A., & Abu-Elmaqk, K. (2015). En bloc Multivisceral and Kidney transplantation in an HIV-Patient: First Case Report. *American Journal of Transplantation, 16*(1), 358-363. doi: 10.1111/ajt.13455

Kutscher, H., Prasad, P., & Morse, G. D. (2016). Emerging Nanomedicine Approaches to Targeting HIV-1 and Antiretroviral Therapy. *Future Virology, 11*(2), 101-104. doi: 10.2217/fvl.15.114

Parikh, S., Fehintola, F., Huang, L., Olson, A., Adedeji, W. A., Darin, K. M., Morse, G. D., Murphy, R. L., Taiwo, B. O., Akinyinka, O. O., Adewole, I. F., Aweeka, F. T., & Scarsi, K. K. (2015). Artemether-lumefantrine exposure in HIV-infected Nigerian subjects on nevirapine-containing antiretroviral therapy. *Antimicrob Agents Chemother, 59*(12), 7852-7856. doi: 10.1128/AAC.01153-15

MORSE, GENE D. (continued)

Rowe, I. A., Tully, D. C., Armstrong, M. J., Parker, R., Guo, K., Barton, D., Morse, G. D., Venuto, C. S., Ogilvie, C. B., Hedegaard, D. L., McKelvy, J. F., Wong-Staal, F., Allen, T. M., Balfe, P., McKeating, J. A., & Mutimer, D. J. (2016). Effect of scavenger receptor class B type I antagonist ITX5061 in patients with hepatitis C virus infection undergoing liver transplantation. *Liver Transpl, 22*(3), 3-297. doi: 10.1002/lt.24349

Makita-Chingombe, F., Kutscher, H. L., DiTursi, S. L., Morse, G. D., & Maponga, C. C. (2016). Poly(lactic-co-glycolic) Acid-Chitosan Dual Loaded Nanoparticles for Antiretroviral Nanoformulations. *J Drug Deliv.* doi: 10.1155/2016/3810175

Bednasz, C., Luque, A. E., Zingman, B. S., Fischl, M. A., Gripshover, B. M., Venuto, C. S., Gu, J., Feng, Z., DiFrancesco, R., Morse, G. D., & Ma, Q. (2016). Lipid-lowering therapy in HIV-infected patients: relationship with antiretroviral agents and impact of substance-related disorders. *Curr Vasc Pharmacol, 14*(3), 280-287. doi: 10.2174/1570161114666160106151652

Lewis, V., Martina, C. A., McDermott, M. P., Trief, P. M., Goodman, S. R., Morse, G. D., LaGuardia, J. G., Sharp, D., & Ryan, R. M. (2015). A Randomized Controlled Trial of Mentoring Interventions for Underrepresented Minorities. *Acad Med, 91*(7), 994-1001. doi: 10.1097/ACM.0000000000001056

Wanga, V., Venuto, C., Morse, G. D., Acosta, E. P., Daar, E. S., Haas, D. W., Li, C., & Shepherd, B. E. (2015). Genomewide association study of tenofovir pharmacokinetics and creatinine clearance in AIDS Clinical Trials Group protocol A5202. *Pharmacogenet Genomics, 25*(9), 450-461. doi: 10.1097/FPC.0000000000000156

PRESCOTT, GINA M.

Woodruff, A. E., Meaney, C. J., Hansen, E. A., & Prescott, G. M. (2015). Azithromycin-Induced, Biopsy-Proven Acute Interstitial Nephritis in an Adult Successfully Treated with Low-Dose Corticosteroids. *Pharmacotherapy, 35*(11), 169-174. doi: 10.1002/phar.1660

SLAZAK, ERIN M.

Slazak, E. M., Fodero, K. E., & Albanese, N. P. (2015). Student Pharmacist Perceptions of a Behind-The-Counter Class of Medications. *Journal of Pharmacy Practice, 30*(1), 70-74. doi: 10.1177/0897190015612594

TORNATORE, KATHLEEN M.

Venuto, R. C., Meaney, C. J., Chang, S., Leca, N., Consiglio, J. D., Wilding, G. E., Brazeau, D., Gundroo, A., Nainani, N., Morse, S. E., Cooper, L. M., & Tornatore, K. M. (2015). Association of Extrarenal Adverse Effects of Posttransplant Immunosuppression With Sex and ABCB1 Haplotypes. *Medicine (Baltimore), 94*(37), 37-1315. doi: 10.1097/MD.0000000000001315

TSUJI, BRIAN T.

Ly, N. S., Bulman, Z. P., Bulitta, J. B., Baron, C., Rao, G. G., Holden, P. N., Li, J., Sutton, M. D., & Tsuji, B. T. (2016). Optimization of Polymyxin B in Combination with Doripenem to Combat Mutator Pseudomonas aeruginosa. *Antimicrob Agents Chemother, 60*(5), 2870-2880. doi: 10.1128/AAC.02377-15

Bulman, Z. P., Sutton, M. D., Ly, N. S., Bulitta, J. B., Holden, P. N., Nation, R. L., Li, J., & Tsuji, B. T. (2015). Emergence of polymyxin B resistance influences pathogenicity in Pseudomonas aeruginosa mutators. *Antimicrob Agents Chemother, 59*(7), 4343-4346. doi: 10.1128/AAC.04629-14

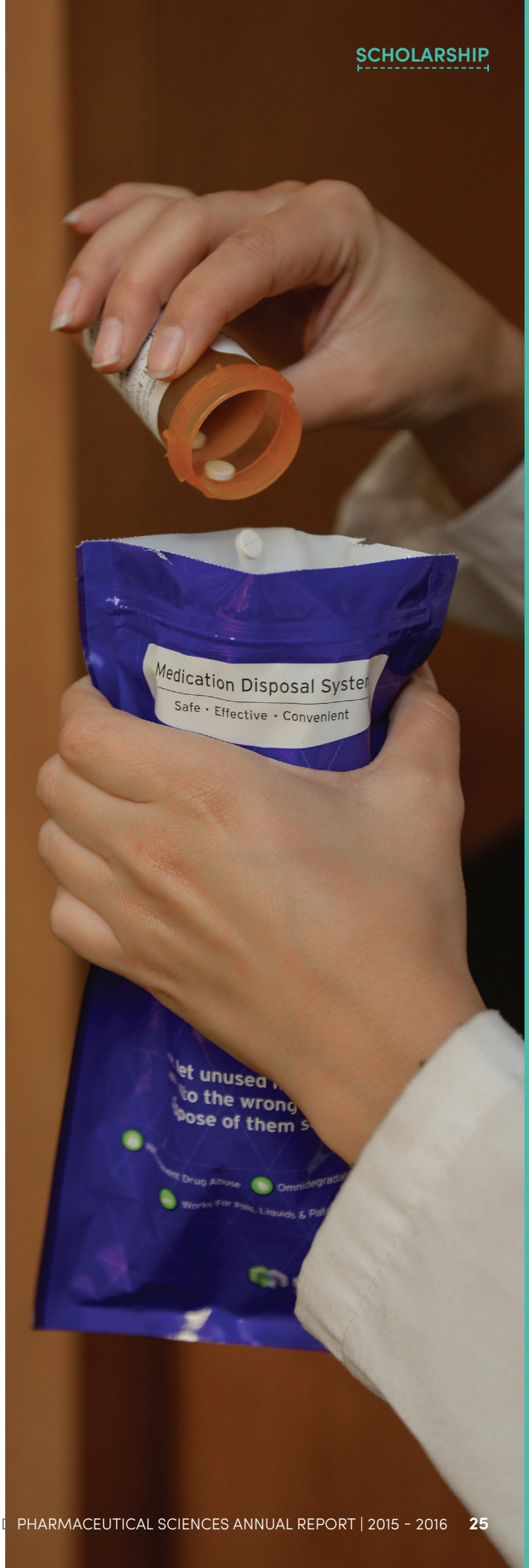
Lenhard, J. R., Brown, T., Rybak, M. J., Meaney, C. J., Norgard, N. B., Bulman, Z. P., Brazeau, D., Gill, S. R., & Tsuji, B. T. (2015). Sequential Evolution of Vancomycin-Intermediate Resistance Alters Virulence in Staphylococcus aureus: PK/PD Targets for Vancomycin Exposure. *Antimicrob Agents Chemother*. doi: 10.1128/AAC.02657-15

WOODRUFF, ASHLEY E.

Beall, J. B., Woodruff, A. E., Hempel, C. A., Wovkulich, M., & Zammit, K. (2016). Efficacy and Safety of High-Dose Subcutaneous Unfractionated Heparin Prophylaxis for the Prevention of Venous Thromboembolism in Obese Hospitalized Patients. *Hospital Pharmacy, 51*(5), 5-381. doi: 10.1310/hpj5105-376

Woodruff, A. E., Meaney, C. J., Hansen, E. A., & Prescott, G. M. (2015). Azithromycin-Induced, Biopsy-Proven Acute Interstitial Nephritis in an Adult Successfully Treated with Low-Dose Corticosteroids. *Pharmacotherapy, 35*(11), 169-174. doi: 10.1002/phar.1660

Woodruff, A. E., Kelley, A. M., Hempel, C. A., Loeffler, W. J., Echtenkamp, C. A., & Hassan, A. K. (2016). Discharge Diuretic Dose and 30-Day Readmission Rate in Acute Decompensated Heart Failure. *Ann Pharmacother, 50*(6), 437-445. doi: 10.1177/1060028016637385



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Margaret Yang's mother, Phoenix Yu

Past touches future

Margaret Yang, BS '75, pledges bequest for scholarships that honor her mother's memory

Margaret Yang has been successful and fortunate.

She was successful in her career as a pharmacist in California, starting in a community pharmacy and then spending most of her professional life working in national chain pharmacies until she retired at 61.

She worked hard for the comfortable retirement she enjoys.

But it was purely her good fortune that she was born the daughter of Phoenix Yu.

Phoenix Yu, who moved with Margaret Yang from China to Hong Kong when Margaret was a child, raised Margaret with few means. Because Phoenix Yu herself hadn't had the chance to go to high school, she knew education would be Margaret's best chance for a better life.

At her mother's urging, Margaret made plans to come to school in the U.S. and chose the bachelor of science in pharmacy program at UB. Sadly, by the time she graduated, her mother's health was failing.

Margaret went home to Hong Kong to care for her mother. Phoenix Yu died a year later.

Since then, it has been the greatest sorrow in Margaret's life that she lost the chance to pay her mother back for her sacrifices—including the sacrifice of her only child's companionship during the years she was so far away at school, years that turned out to be almost her last—by making her mother's golden years comfortable.

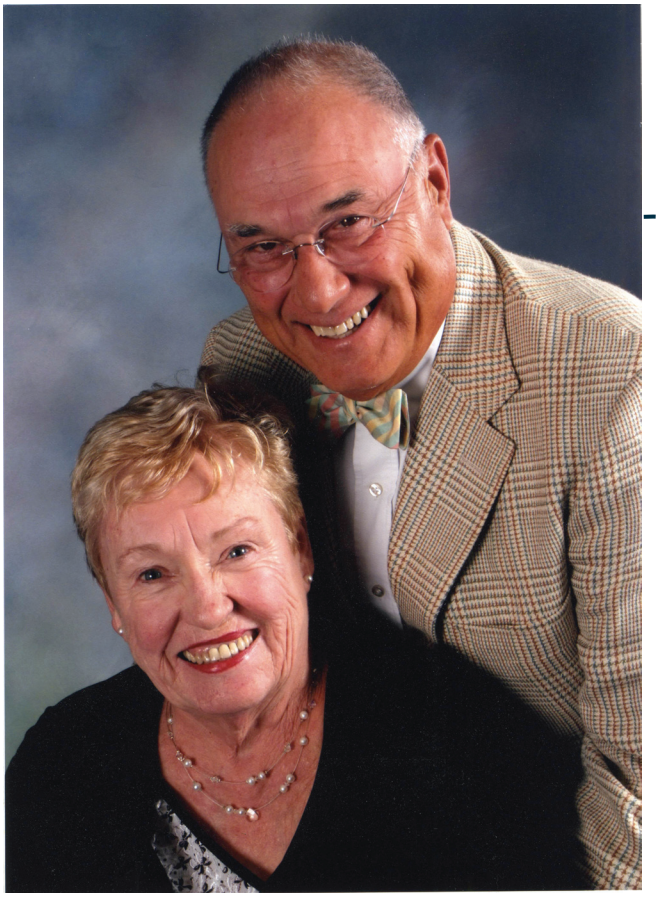
So when Margaret sought a way to honor her mother, she wanted to do so with something living, not a shrine but a memorial that would renew itself year after year, generation after generation.

The living memorial she devised for Phoenix Yu will be the careers of the UB PharmD's who earn degrees with help from the Phoenix Yu Scholarship Fund. The fund will eventually be endowed through a bequest commitment Margaret recently made as a planned gift to the School of Pharmacy and Pharmaceutical Sciences.

What her mother hoped for her came to be. And, through Margaret's generosity, one day the legacy of those hopes will encourage UB PharmD students who benefit from the scholarship funds endowed in Phoenix Yu's name.

"I hope the scholarship can help dedicated students to concentrate and finish their studies, free from financial hardship," Margaret says.

In this way, the past touches the future, is remembered, and lives on by doing good.

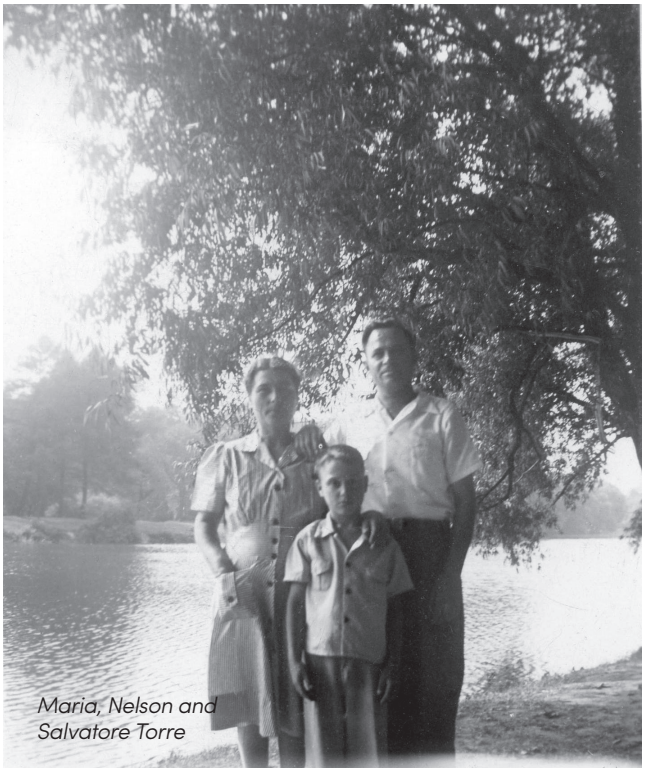


The value of opportunity

Nelson Torre, MD, BS '56, gives generously to establish a scholarship for first-generation Americans

Salvatore and Maria Torre emigrated from Sicily to Buffalo, NY, in the early 1920s "for the freedom and opportunity the U.S. offered," Nelson Torre, MD, a 1956 graduate of the School of Pharmacy and Pharmaceutical Sciences, says about his parents.

Torre says his mother and father taught him and his sister, Sylvia Torre Giordano, "the value of hard work and education." The brother and sister were born in Buffalo, and attended Buffalo public schools. Torre went to St. Joseph Collegiate Institute for high school. The siblings then received scholarships to attend the University at Buffalo, each graduating cum laude with a bachelor of science degree in pharmacy.



Maria, Nelson and Salvatore Torre

Their positive experience as first-generation college students at the university inspired Torre to establish a UB scholarship for PharmD students whose parents are immigrants. He gave generously to create an endowed scholarship, and plans to contribute to the fund annually.

"We are so grateful for the important contribution that UB made in our lives," Torre says.

After UB, Torre went on to graduate cum laude from SUNY Upstate Medical University in 1961, and began practicing as a rheumatologist. He also is board-certified by the American Board of Internal Medicine.

"I practiced in Buffalo," Torre says, "at Sisters of Charity Hospital, where I became chief of medicine and program director for internal medicine." He also was a clinical professor of medicine at UB from 1986 to 2007.

He and his wife, Joyce, have been married 59 years, and have four children, two daughters and two sons, and 11 grandchildren.

Torre said starting the endowed scholarship fund is his way of making it possible for future UB pharmacy students to have the same opportunities the university gave to him and his sister.

"Because of my parents' journey, we felt it would be wonderful to help other young people, especially first-generation Americans, in their educational pursuits," he says.

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Jennie Bauda Demuth Scholarship Fund
Danielle Davide

Because of your generosity, I have the opportunity to break-down health care barriers for underserved populations in Western New York.

– Sarah Dascanio, '17

Joseph Bauda Scholarship Fund
Robert Jones
Shunxin Lin
Haley Schilling

David and Jane Chu Scholarship Fund
Gao Chong
Keith Dolcy
Jamie Gaesser
Adam Heiermann
Anthony Torres

Robert M. Cooper Memorial Scholarship Fund
William Gavin
Vincent Mark
Carly Poccia
Kaitlyn Victor

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Nicolette Dibuduo
Angeline Walker

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Kevin Szeto
Lina Wu

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Pamela Emerson Scholarship Fund
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Shelby Janutol
Amanda Mogul
Kristin Qian Qian Yin
Jonathan You

Paul Jones Scholarship Fund
Nicolette Dibuduo

John Kapoor Fellowship in Pharmaceutical Sciences Fund
Vivaswath Ayyar

Gilbert J. Kulick Scholarship Fund
Gabrielle Cozzi

Lorren Larwood Scholarship Fund
Maggie Huynh
Meghan Logue
Karen Louie
Jovin Panthapattu
Ali Scrimenti
Jia Situ
Senbin Zhang

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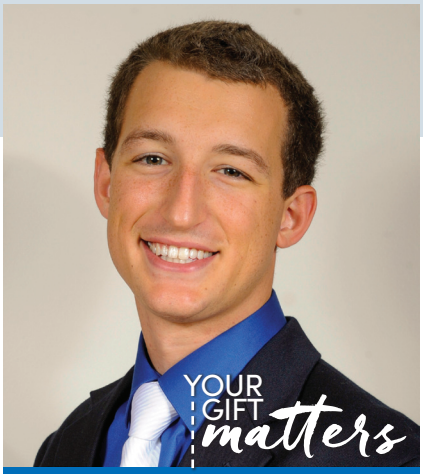
Keith Dolcy
Peter Fendt
Jamie Gaesser
Adam Heiermann
Brandon Wolski
Sammy Yafai

William McCoach Scholarship Fund
Bryan Mogle



Alumni support has allowed me to pursue post-graduate residency opportunities.

– Corey Wells, '17

Cecil & Violet Newton Scholarship Fund

Ahmed Abd-Elrahman
Adesayo Akinsanya
Connie Chan
Hao-min Chang
Jian Chen
Ting Chen
Yujie Chen
Candace Chin
Jessica Costello
Gabrielle Cozzi
Danielle Davide
Anthony DeGelorm
Olivia Dioguardi
Katelyn Evan
Norbert Futeran
Kaylee Gross
Yao Guan
Emily Hull
Shelby Janutol
Erica Jeter
Eun Tae Kim
Hyunghoo Kim
Sara Kim
Ha Young (Ryu) Ko
Nicole Kostrzebski
Kwannok Leung
Andrew Liang
Nan Tong Lin
Nadia Mansouri
Vincent Mark
John Fraser McArthur
Bryan Mogle
Rebecca Nazaro
Julie Obenauer
Tiffany Pan
Bhumi Patel

Cecil & Violet Newton Scholarship Fund (continued)

Kyle Polanski
Ajay Porosh
Kristen Russo
Haley Schilling
Matia Senyonga
Emmanuel Jean Simon
Kevin Szeto
Anthony Torres
Kaitlyn Victor
Brian Voorhees
Nana Wang
Zhao Na Wang
Erin Wattengel
Corey Wells
Lina Wu
Sammy Yafai
Qian Qian Yin
Jonathan You
Francine Yung
Nahid Zaman
Cody Zhang
Liang Zhuo

Henry A. Panasci, Jr. Pharmacy Scholarship Fund

Ahmed Abd-Elrahman
Peter Fendt
Carly Poccia
Kelsey Violanti

Rudin Scholarship Fund

Deon Edionwe

Scholarship support has given me the opportunity to enhance my experience at UB by taking on student leadership roles at the school.

– Deon Edionwe, '19

UB School of Pharmacy and Pharmaceutical Sciences Alumni Association Scholarship Fund

Candace Chin
Sean SeongJun Choi
Jenna Covelli
Anthony DeGelorm
Alexandra Haberman
Sammy Yafai

UB School of Pharmacy and Pharmaceutical Sciences Golf Tournament Scholarship Fund

Laura Bielecki
Brian Bowman
Catherine Gawronski
Mia Magliazzo
Ciera Patzke
Carly Poccia
Ryan St. James

UB School of Pharmacy and Pharmaceutical Sciences Scholarship Fund

Brittany Boland
Jessica Choi
Sara Kim
Amanda Mogul

Walgreens Scholarship Fund

Jordan Bernard
Raheal Boadi-Yeboah
Kezia Gravesande
Yoscar Ogando

Walmart Scholarship Fund

William Gavin

Women's Club of Columbia Scholarship Fund

Laura Bielecki
Ha Young (Ryu) Ko
Nadia Mansouri
Brian Voorhees

The Hayes Society

The Hayes Society honors individuals who have made legacy gifts to the School of Pharmacy and Pharmaceutical Sciences through a bequest or other method of deferred giving.

Allen Barnett, '65
Ralph Behling, '39, '40
Thomas Blanchard, '61
Daniel & Gayle Brazeau, '89
Nina Doran, '53
Joseph Figlow, '70
Edward, '52 & Jean Frank, '54
Carol Gloff, '75
Florence Ho, '75 & Wing Fung
Rose Mary Madejski, '59
DeWitt Niles, '62
Robert Ravin, '57
Irving Sultz, '55
Ralph Vescio, '55
Margaret Yang, '75

To learn more or notify the school of a legacy gift that you have planned, please call the Office of Philanthropy and Alumni Engagement at (716) 645-3432 or visit our web site at pharmacy.buffalo.edu.

Honorary and Memorial Gifts

In Memory of Alexander Aversano, '63
Anthony and Camille Passarella

In Memory of Thomas J. Bardos
Vitauts, '61, '64 & '74 and Brigita Alks
Wayne and Lorraine Anderson
Maria Bardos
Dennis Bogyo, '75 and Luana Goodwin, '71
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David and Ann Triggle, '68
Tarik Veysoglu, '75
F. Christopher Zusi, '79

In Memory of Samuel Bursuck '34
Bonnie Tangalos

In Memory of X. Dave '49 and Lois D'Ambrosio
David D'Ambrosio
Tad D'Ambrosio
Robin DiFrancesco
Colleen Robinson

In Memory of Bernhard Esch '61
Kevin and Judith Cline
The Edwards Family
Joanne Hoffman
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Richard and Kay Ten Haken
Megan Toufexis
Bernhard, '55 and Sandra Weinstein
Gerald and Emilie Willman
Leigh Yates

In Memory of Lori Esch '97
Vitauts, '61, '64 & '74 and Brigita Alks
Andrew and Andrea Esch
Bernhard, '61 and Coraline Esch

In Memory of George Lisch '54
Harvey Lisch, '83

Returning the favor

Florence Ho, BS '75, pledges bequest for scholarships in gratitude for tuition waiver that helped her

Florence Ho and her husband, Wing Fung, both grew up in Hong Kong, but didn't meet until 1970 in Knoxville, Tennessee.

After her pre-pharmacy, she headed to Buffalo to attend UB's pharmacy school. "I was a foreign student and most pharmacy schools were reserved for in-state students," she said. "That was one of the reasons I came to UB." After the couple became engaged, Fung left the U.S. to join the University of Malaya as an assistant professor, then joined the RPI faculty in Troy. The couple married in Buffalo in 1974.

"I missed enjoying college life like other students because my priority was to graduate in time due to my financial situation," Ho said. "The workloads of the pre-pharmacy and pharmacy programs were very heavy."

Ho was an orphan, raised by her "eighth uncle," her grandfather's eighth son. Her own father, the sixth son, and mother had died when Ho, their only child, was 10 years old. She was grateful for a tuition waiver from UB, which helped relieve the financial burden of her uncle, who also had his own son.

She never forgot UB's generosity. Fung and Ho recently pledged a bequest commitment to eventually endow a scholarship for students like her—first-generation PharmD students with financial need.

"Like me, some students are not lucky enough to have parents to help them," said Ho.

One of the first members of her class of 1975 to join the pharmacy school's Willis G. Gregory Society, Ho said she gives back to UB because of the high-quality higher education she received.

Both she and Wing attribute their professional success to their respective degree programs, which helped the couple when they returned to Hong Kong to begin their careers in 1975: Ho as a pharmacist and Fung as a professor of analytical chemistry at Hong Kong University.

But Hong Kong was in the midst of political uncertainty in the 1980s, on a path to being returned to China, and communist rule. Ho and Fung had begun more than their careers in their home country: they also had started a family, and had two sons to think about. The family moved back to the United States while their boys were still in elementary school.

Once settled, "we started our careers from scratch," Ho recalled. "Wing switched from teaching analytical chemistry at HKU to making polymer (organic syntheses). I dug out old notes and studied hard each day after sending the kids to school, so I could take the pharmacy board exam. I wished I could have dug up a sack of gold in my back yard so I didn't have go through that!"

After passing the board exam, Ho worked as an intern, and then became a pharmacist, working part-time until her older son went to college. She switched then to being a full-time pharmacist at CVS.

Because their sons spent time in Tennessee during one of Fung's sabbatical leaves—they attended kindergarten and preschool during the six-month period—"they didn't have any language or cultural barriers when we moved back to the U.S.," Ho said.

Their sons both work in the United States: the older son is a doctor at the Oak Ridge Hospital in Tennessee, and the younger son works as a computer software engineer at Intel in Hillsboro, Oregon, and volunteers with the National Guard.

Ho said higher education is at the foundation of her family's success, and is the reason why she gave back to UB to set up a scholarship for future pharmacy students.

"Education is critical for young people," she said. "I was lucky to have a tuition waiver from UB to help me finish my pharmacy education. Both my sons had good educations and have good careers. With God's blessing, both my husband and I are in good health and have good jobs. Wing is the VP of technology of a chemical company. This is the time for me to give back to my university."

Ho also advised incoming students to "make use of the opportunities, work hard in school and the rest would fall into place."

[FINANCIAL REPORTS]

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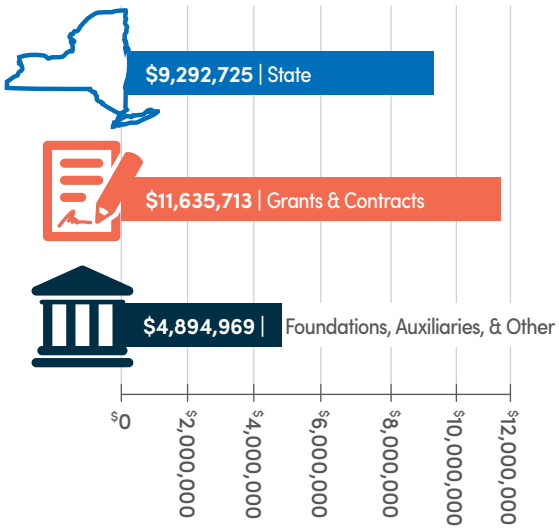
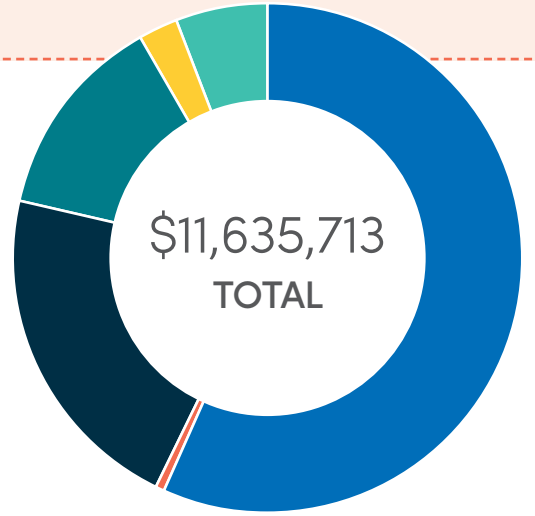
Karen Dallas *(recording secretary)*

Amount of Total School Revenue by Funding Source



$25,823,407
TOTAL

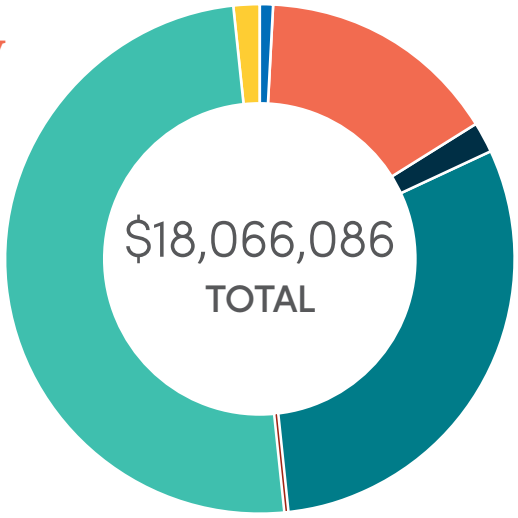


Expenditures by Funding Source

$6,601,195	Federal NIH
$88,475	Federal Other
$2,460,832	State
$1,539,835	Corporate/Industry
$273,258	Foundations/Nonprofit
$672,118	Other

School of Pharmacy Endowment

$183,091	Award
$2,747,601	Dean
$343,646	Lecture
$5,470,780	Departmental
$35,824	Museum
$8,990,014	Scholarship
$295,130	Special



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- Educational Program
- Tours of Kapoor Hall
- Reunion Cocktail Party

SATURDAY, OCTOBER 7

- UB Bulls Football and Tailgate Party