

BuffaloPharmacy

MAGAZINE

VOLUME 3 | 2020



Positioning
Pharmacists
to improve health
care transitions
p6



CREATING A CULTURE OF
PATIENT SAFETY p8

UB STUDENTS LEAD THE WAY
THROUGH **ADVOCACY** p9

THE BENEFITS OF
MICRO-CREDENTIALS p10

EDITORIAL TEAM

Rebecca Brierley

Assistant Dean and Director of
Communications and Alumni Relations
Office of External Affairs

Kara Sweet

Assistant Director of Communications
and Alumni Relations
Office of External Affairs

FEATURE STORIES

Gabe DiMaio

S. A. Unger

PROOFREADING

G&A Services

PHOTOGRAPHY

Nancy J. Parisi

Social Documentation Photography

Joseph Priore

Nicole Knauber

Priore Photography

GRAPHIC DESIGN

Ellen Stay

Stay Graphic Design

Buffalo Pharmacy Magazine is an annual publication of the University at Buffalo School of Pharmacy and Pharmaceutical Sciences.

Inquiries/Change of Address/

Email Updates:

University at Buffalo
School of Pharmacy and
Pharmaceutical Sciences
Office of External Affairs
288 Pharmacy Building
Buffalo, NY 14214-8033

716-645-3340

phm-alumni@buffalo.edu
pharmacy.buffalo.edu

Message From The Dean

Our 2020 Buffalo Pharmacy Magazine highlights many impressive accomplishments, meaningful stories and engaging moments of our faculty, staff, students and alumni. Their leadership and innovation are helping to reshape health care and are the reason for our success, allowing us to provide an exemplary education for all SPPS students.

For more than 130 years, we have been leaders in pharmacy education. Recently, we launched an MS in Pharmacometrics and Personalized Pharmacotherapy, one of only a few in the country, which will provide students with the skills to optimize drug therapy, allowing for the provision of precision medicine and individualized therapies. We have also added micro-credentialed programs that give pharmacy and pharmaceutical sciences students the opportunity to add enhanced competencies in data analysis, clinical and translational research, and application of enhanced patient care principles and leadership.

Our PharmD students and faculty were recognized nationally for a comprehensive approach to reducing hospital readmissions through their Transitions of Care (TOC) program. These collaborative concepts are integrated into our curriculum, allowing students to take what they learn in the classroom and apply it while on rotation. Treating patients holistically has always been a

**For more than 130 years,
we have been leaders in
pharmacy education.**

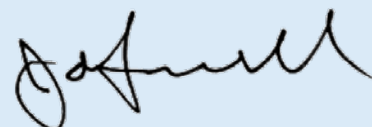
hallmark of pharmacy care. I encourage you to read more about these novel TOC approaches in our feature article.

On a sad note, we recently lost a member of our staff, Julie Kopfer, administrative assistant in the Department of Pharmacy Practice.

In a small school like ours, it is always a shock when a valued colleague passes away unexpectedly. Her enthusiasm, positive outlook and contributions to our continuing education programs and department support will be remembered fondly.

I hope you enjoy the stories and articles in the pages that follow. I am immensely proud of our collective accomplishments and look forward to supporting our future achievements in education, research and service.

Warm Regards,



James M. O'Donnell, PhD
Professor and Dean



In This Issue

COVER STORY

6 Positioning Pharmacists to Improve Health Care Transitions

Seamless and effective continuity for the patient equals better health outcomes, fewer hospital readmissions and lower health care costs. Our faculty and students are leading this charge regionally and nationally.

FEATURES

8 Creating a Culture of Patient Safety

Interprofessional collaboration led by Robert Wahler (PharmD '00) aims to improve medication safety for aging adults while maintaining quality of life.

9 UB Students Lead the Way for Passage of Student Immunizer Bill

New York State now allows pharmacy interns to administer certain immunizations under the supervision of a licensed pharmacist, thanks to the tireless grassroots efforts by our students.



10 Micro-credentials: Flexible and Customizable Educational Experiences

UB's micro-credential programs offer students a unique opportunity to differentiate themselves academically and professionally.



DEPARTMENTS

2 CELEBRATIONS AND COMMUNICATIONS

Engaging Tomorrow's Students; Class of 2023 by the Numbers; Words of Wisdom to Graduates; Celebrating Service and Leadership; The Final Fore

12 INNOVATIONS

The Healing Properties of Food; New Master's Degree; Bringing New Hope to Alzheimer's Patients

14 STUDENT LIFE

Grads Join Rutgers Fellowship Program; PharmD/MBA Students Named WNY Prosperity Fellows; UB Celebration of Excellence; Preparing and Educating for Lifesaving Interventions

16 ACCOLADES

Making Connections in Experiential Education; A Lifetime of Scholarship in Pharmaceutical Sciences; Past Faculty Leaders; Recognizing Excellence; In Memoriam

20 ALUMNI ABSTRACTS

A Time to Reconnect; Prior Paths to Pharmacy Remembered; Pharmacists on Ice; Main Street to Hollywood; Helping Others and Giving Back

IN EVERY ISSUE

Up Close and Personal	5
Vintage Apothecary.....	20
Top 5 List	22
Thanks for Your Support	25
Scholarly Pursuits.....	33



Pharmacy Summer Institute: Engaging Tomorrow's Students



BY KARA SWEET

The early July days of summer were anything but lazy for the 48 students who attended our 2019 Pharmacy Summer Institute.

Now in its fourth year, the program for high school and college students offers a broad scope of learning experiences, including a variety of hands-on activities and visits to local clinical practices and research labs. Also presented are lectures by UB faculty and Buffalo-area alumni on topics ranging from vaccinations to the future of the profession.

The program is continuously evolving based on student evaluations, says Jennifer Rosenberg, associate dean of admissions and advisement. "The timing, content and type of sessions have been adjusted annually to provide the best possible experience," she says.

The ins and outs of pharmacy practice are showcased through innovative sessions, such as patient counseling, compounding of medications, a highly unique interprofessional education forum and other clinically focused health care activities.

To further prepare students for health care careers, educational opportunities at the pharmacy school are also highlighted, and recommendations are offered on

preparatory high school courses focused on undergraduate pharmacy coursework.

15%
percentage of Pharmacy
Summer Institute attendees
now enrolled as PharmD
students

Student feedback has been overwhelmingly positive. "It was great spending almost a week at University at Buffalo this summer," said Natalia, a 2019 attendee. "The staff and the students I met were truly amazing. I believe that UB is a perfect fit for me."

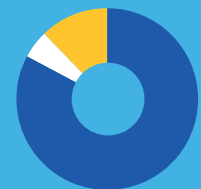


View photos from our 2019 Pharmacy Summer Institute.

CLASS OF 2023 BY THE NUMBERS

Middle 50th*
Percentile of PCAT
Composite Score:
60%-89%

Middle 50th*
Percentile Science
& Math GPA:
3.1-3.7



In-State: **83%**
Out-of-State: **5%**
Foreign Citizen: **12%**



Females: **67%**
Males: **33%**

INTERVIEWED: **259**

ENROLLED: **132**

AVERAGE AGE: **21**

11

Number of U.S. States/Canadian
Provinces/International
Countries Represented

2 YEARS OF LESS
OF COLLEGE:

47%

3 YEARS OR
HIGHER:

11%

BACHELOR'S OR HIGHER:

42%

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



Watch the Class of 2023 receive their white coats.

Pieper Offers Words of Wisdom to 2019 Graduates

BY KARA SWEET

John Pieper (PharmD '79), president of the St. Louis College of Pharmacy, was our 2019 Commencement keynote speaker. He discussed the profound impact the school and university had on him and his career.

“My years here at the [school] were transformative in developing me as a person, a clinician, a clinical scientist and an academician. The faculty here instilled in me the ability and the confidence to take risks, the ability and confidence to know that I can accomplish whatever I set my heart on.”

Pieper stressed the importance of mentorship and encouraged each graduate to incorporate creativity and originality into every aspect of their career.

“The exploration of who you are, to dream who you might become, and then to develop a path to achieve your dream is the whole purpose of your education here at UB.”

Pieper has more than 80 peer-reviewed research publications and approximately 100 published research abstracts in cardiovascular pharmacotherapy, pharmacokinetics and drug metabolism. He is a fellow of the American College of Clinical Pharmacy and the International Pharmaceutical Federation.



John Pieper (PharmD '79), President, St. Louis College of Pharmacy



Muhammad Malik (PharmD '19), Nadia Mansouri (PharmD '19), Farah Al Qaraghuli (BS '16 & MS '19)

“My years here at the [school] were transformative in developing me as a person, a clinician, a clinical scientist and an academician.”

John Pieper



Watch our 2019 Commencement ceremony.

2019 COMMENCEMENT STATS

131 Doctor of Pharmacy degrees conferred

5 Doctor of Pharmacy/
Master of Business Administration

1 Doctor of Pharmacy/
Juris Doctor

4 Doctor of Pharmacy/
MS in Pharmaceutical Sciences

14 Bachelor of Science in
Pharmaceutical Sciences
degrees conferred

10 Master of Science in
Pharmaceutical Sciences
degrees conferred

12 Doctor of Philosophy in
Pharmaceutical Sciences
degrees conferred

2019 Awards Ceremony: Celebrating Service and Leadership

BY KARA SWEET

Willis G. Gregory Memorial Alumni Award: Lee Vermeulen (BS '90)

Lee Vermeulen was recognized with the school's most prestigious alumni award for his exemplary career accomplishments and leadership.

Vermeulen is chief of enterprise academic service lines for UK HealthCare, the University of Kentucky health system where he is responsible for development and oversight of enterprise-wide academic service lines delivering integrated care across multiple units, disciplines and demographics in a value-based, patient-centered model.

He is also a professor of medicine and pharmacy at UK and an active researcher with more than 80 peer-reviewed publications emphasizing the cost and value of emerging health care trends.

Orville C. Baxter Memorial Professional Practice Alumni Award: Christopher Rubino (PharmD '96)

Christopher Rubino was honored for his leading innovative pharmacy practice as executive vice president of pharmacometrics for the Institute for Clinical Pharmacodynamics, a company that uses PK-PD to integrate preclinical and clinical data through modeling and simulation.

He has served as a resource for pharmaceutical firms during the submission

of adult- and pediatric-related filings to the FDA and the European Medicines Agency across several therapeutic areas. Rubino has authored more than 50 peer-reviewed publications, assisted in refereeing numerous industry journals and serves as a UB SPPS adjunct associate research professor.

Teacher of the Year Award: Tammie Lee Demler (BS '92 & PharmD '02)

Tammie Lee Demler is an adjunct associate professor in the Department of Pharmacy Practice. Student supporters raved about her teaching style:

"I love her enthusiasm for teaching and her passion for helping students."

"She makes class very entertaining but informative. One of the best professors I have had at UB."

"Dr. Demler teaches us information that is utilized in the real world, not just what the textbook says."

Staff Member of the Year Award: Pamela Coniglio

Pamela Coniglio is the Introductory Pharmacy Practice Experiences (IPPE) coordinator in the Office of Experiential Education. Her colleagues and students praised her hard work and dedication:

"She's the greatest! Always goes out of her way to help when asked and knows the answers to everything."

"Pam is friendly and hardworking. UB is very lucky to have Pam."

"She has been a great resource for all of my IPPE questions, and an incredible help with professional organizations!"

Daniel H. Murray Memorial Professional Development Award: Emily Hart (PharmD '19)

Emily Hart received the Daniel H. Murray Memorial Professional Development Award for her innovative research and extraordinary scholarly work on proton pump inhibitors and their impact on kidney health, all while maintaining a high level of academic success.

View the complete award winner list: pharmacy.buffalo.edu/awards.

PRECEPTOR AWARDS

IPPE Outstanding Contribution Award

Brian Sultana PharmD '16

Professional Practice Elective Preceptor of the Year

Kalpesh Desai BS, PharmD

J. Fred Bennes Outpatient Care Preceptor of the Year

Joseph Navarra RPh

Inpatient Care Preceptor of the Year

Angela Borton PharmD '13

Pharmacy Practice Faculty Preceptor of the Year

Fred Doloresco MS, PharmD



2019 school wide award winners

The Final 'Fore'

BY KARA SWEET

Our 16th Student Scholarship Golf Tournament was held June 10 at Grand Island's River Oaks Golf Club. It was our final tournament.

Since 2004, support of our tournament has allowed more than 80 students to receive scholarships totaling more than \$80,000. The generosity of our golfers over the past 16 years will allow us to award annual scholarships to deserving students for many years to come through our golf scholarship endowment.

Our sincere thanks to all of our tournament participants. Your partnership and support have made a long-lasting impact on pharmacy students past, present and future. We will be implementing new and exciting ways we can continue to support student scholarships—stay tuned!



2019 Student Scholarship Recipients:

Mary Hejna '20, Dean James O'Donnell, Laurie Plewinski '21, Stephanie Lanza '20 Not pictured: Pauleena Pal '20, Zakiya Rhodie '21

Tournament Winners:



[View more photos from our 2019 Golf Tournament.](#)

First-Place Foursome (with a score of 62)

Zach Giroux, Brad Arthur, Don Arthur, Steve Giroux (BS '81)

Second-Place Foursome (with a score of 64)

Shawn Bradley, Scott Jarmusz, David Knee, Andrew Reidy (PharmD '16)

Closest to the Line, Hole 10 Chris Sauls

Closest to the Pin, Hole 16 Kalpesh Desai

Longest Drive, Hole 9 Adam Salyer (PharmD '19)

Closest to a Hole in One, Hole 5 Alec Romanowski (PharmD '20)

Tournament Sponsors:

Grand Sponsor: Rochester Drug Cooperative

Bronze Sponsors: Independent Health; J. Rutowski and Sons Inc.; Middleport Family Health Center; Dean Salyer (BS '85) and Brian Loucks (BS '86); Woodmark Pharmacy

UP CLOSE &
PERSONAL
WITH OUR FACULTY

David Jacobs

PHARM.D '11, ASSISTANT PROFESSOR,
PHARMACY PRACTICE



Dr. Jacobs, what is your favorite place in the Pharmacy Building and why?

The café. Always has a hot cup of coffee ready on those snow-filled days.

What is your favorite topic to teach and why?

Clinical research methods and biostatistics. I enjoy seeing students fully grasp these topics when they apply them to their own research. It's not just about the didactics but more importantly their application to a real-world problem.

What are the "hot topics" in pharmacy now and why do they interest you?

The integration of implementation and team science into clinical pharmacy practice. This field addresses the research-to-practice gap and accelerates implementation of evidence-based interventions and services in real-world settings. As pharmacists, we regularly implement introduce evidence-based programs, but we have yet to fully grasp implementation and team science. Numerous opportunities to apply evidence-based interventions exist across pharmacy practice such as novel care delivery models (e.g., transition of care programs, comprehensive medication management) or applying data analytics to improve patient care quality.

What has been your proudest professional accomplishment?

Seeing my students and trainees present and being recognized for their research at national conferences.

If you were stranded on a desert island and could only bring one book, one movie and one record what would each be and why?

Book: Anything by the author James Patterson (It's a nice easy read)

Movie: "The Other Guys" (It makes me laugh every time)

Record: "Diamonds" (compilation of greatest hits by Elton John, including one of my favorites, "Your Song")

H

Rx

Positioning Pharmacists to Improve Health Care Transitions

BY GABE DIMAIO

Transitions of care (TOC) refers to the process of moving a patient from one health care setting to another. That movement could be to a different location, such as a hospital, long-term care facility or home, or it could be within an individual setting, such as different departments in a hospital, from an emergency room to a general medicine floor.

Seamless and effective continuity for the patient equals better health outcomes, fewer hospital readmissions and lower health care costs. As health care is becoming more value-based, there is an impetus for delivering cost-effective health care while improving patient outcomes. Other economic and patient health drivers are changing the landscape, too. The Centers for Medicare & Medicaid Services' Hospital Readmission Reduction Program applies penalties if hospitals have readmission rates above a national standard for patients with specific higher-risk diagnoses.

Many factors can undermine transitions of care, including ineffective communication between health care providers or between a health care provider and the patient. Medication discrepancies can also be a problem if vigilant attention is not paid to the type and amount of drugs a patient is taking.

Pharmacists are uniquely positioned to address transitions of care issues. University at Buffalo pharmacists are leading this charge regionally and nationally.

"Even though we all have electronic health records, they all don't talk to each other. Having someone who is looking at medication lists from all settings can really be beneficial in not only streamlining but also making sure actual or potential problems don't creep up and cause problems for the patient," says Erin Slazak (PharmD '04), clinical assistant

professor, pharmacy practice.

Collin Clark (PharmD '17), clinical assistant professor, family medicine and adjunct instructor, pharmacy practice, says he's seen firsthand what can go wrong when it is not done well.

"We see patients on two medications in the same class that really shouldn't be used together. We see doses that are inappropriate for patients or durations of therapy that are much longer than they should be based on the data that we have," Clark says.

This transitions of care process can happen in-person or on the telephone. Each method has its pros and cons, but both are time intensive. As health care resources are limited, attention is paid to the patients who would benefit most. Christopher Daly (PharmD/MBA '12), clinical assistant professor, pharmacy practice, says he doesn't think it needs to be applied to all patients, just those at higher risk. He suggests patients with two or more chronic diseases—or those on multiple or high-risk medications—should be considered.

Daly says the effectiveness of having a pharmacist involved in transitions of care has been well studied. He suggests the key will be recognition from health care systems and C-suite executives.

"I would hope at some point we will place more pharmacists in these types of positions,



and I hope the health care sector grows to recognize pharmacists can be impactful in this area. It would be very important to have more of those opportunities,” says Daly.

Education of Pharmacy Students

TOC training has gradually been woven into the PharmD curriculum. Beginning in the P1 year, students address safe medication transitions using evidenced-based solutions. Those foundational concepts are built upon in the P2 and P3 years with training in medication reconciliations and evaluation of safe transitions at hospital discharge (including patient interviews) and culminate with reinforcing the important role pharmacists have post-discharge. This sequenced instruction results in a certificate in medication therapy management from the American Pharmacists Association (APhA).

High Street Prescription Center were an integral component of the pharmacy’s TOC initiatives and provided more than 1,200 telephone-based medication counseling and reconciliation calls to recently discharged patients.

UB PharmD students conducted over 1,200 telephone medication counseling interventions for Buffalo General Medical Center’s High Street Prescription Center.

Transitions of Care from Another Angle

Transitions of care mainly centers on the inpatient side, with medication reconciliation and discharge counseling taking place as a patient leaves the hospital.

A team of researchers from the School of Pharmacy and Pharmaceutical Sciences is advocating for more research focused on the impact of transitions of care in outpatient primary care settings. They are trying to determine if these interventions can achieve better, more cost-effective results for high-risk patients.

“The real difficulty with transitions of care right now is we don’t have a good tool to appropriately identify who is truly at high risk, in the sense that they are going to benefit most from pharmacist intervention,” says Slazak.

Originally, two pilot studies were done at Slazak’s practice site at General Physician, P.C., to better assess high-risk patients. Now there is grant funding for a larger, more robust study at multiple primary care sites. Daly and Clark are part of that research team, along with David Jacobs (PharmD ’11 & PhD ’18), assistant professor, pharmacy practice.

Using a systematic approach and a stringent study design, Jacobs is developing the protocols and analyzing the data to determine the impact.

“That’s the goal with any of these health service interventions we put into play,” says Jacobs. “It’s not just that we put them there but that they are showing an overall impact in care or costs.”

As part of the expansion to a custom randomized trial, the team will also consider the patient’s feedback on the transition of care. If they can show TOC is effective in these practices, they would like to implement it on a larger scale and ascertain which specific type of interventions work best.

Jacobs says their team expects to report on preliminary data by 2021.



Courtney Cardinal (PharmD '17), Erin Slazak, Merin Panthapattu (PharmD '19) and Daniel Girgis (PharmD '19) at General Physician, P.C. in Amherst, N.Y.

The real test of TOC training occurs on experiential rotations. Not only do students get to conduct the interviews with actual patients, they also write up Subjective Objective Assessment Plan (SOAP) notes, ensuring that complex patient information is accurately recorded. After the PharmD student’s SOAP note is reviewed by a licensed pharmacist, these updates go into the patient’s medical chart along with clinical recommendations based on this new information.

As recently reported in the Journal of American Pharmacists Association, UB PharmD students on rotation at Buffalo General Medical Center’s

Creating a Culture of Patient Safety

BY GABE DIMAIO

Researching More Effective Care for Aging Adults

It wasn't until he was questioned by a mentor that Robert Wahler (PharmD '00) fully considered his decision to research ways of preventing falls in aging adults. After all, the mentor said, studying falls in this demographic was "not sexy." Later, while ruminating on the decision, Wahler realized that his motivation stemmed from his father's chronic conditions that caused multiple falls and broken bones.

Wahler, clinical associate professor in the Department of Pharmacy Practice, is a core member of the multidisciplinary Team Alice in the University at Buffalo's Center for Successful Aging (UBCSA) whose mission is to protect seniors from medication-related harm. Seed funding for UBCSA from the State University of New York, UB and SPPS, along with Wahler's specific research, underscore institutional commitments to this important clinical area.



Wahler's work aims to help seniors avoid the devastating impact of falls such as those his dad sustained. "Statistically, we still have a 50 percent mortality rate one year after a fall," he says. "That's kind of scary." He points to data from the Centers for Disease Control and Prevention reporting the rate of fatal falls in aging adults is four times as great as fatal opioid overdoses.

Wahler says safe use of medications is one of the better ways to prevent falls and keep seniors out of the hospital, but there are challenges. The goal is to balance the use of medication to prevent disease and maintain quality of life without causing harm.

In order to prevent errors and injury from medications, there is now an increased focus on the culture of patient

safety. All patient care team members need to be involved, from pharmacy technicians and pharmacists to provider groups and hospitals. Insurance providers are also an important part of the solution.

To ensure quality of life, Wahler is conducting research into contributing factors for fall-risk including weakness,

The goal is to balance the use of medication to prevent disease and maintain quality of life without causing harm.

balance instability and medications. Wahler hopes to develop better patient-driven and system-driven models to address overprescribing within this age group. By critically reviewing deprescribing of medications to reduce the number of fall-risk inducing drugs (FRIDs) and replacing them with an alternate regimen, or removing them entirely if practical, the fall-risk for senior patients is significantly reduced.

Wahler and his colleagues have received significant UB and SUNY funding for a number of key initiatives they are leading through their innovative research:

Physician Office Sites

Placing a pharmacist in a family medicine practice site to reconcile the patient's medications and identify potentially harmful medications or combination of medications, and collaborate with the primary care team to deprescribe them.

Direct Patient and Care Giver

Pharmacists engaging directly with the patient or caregiver to garner subjective information that might determine a higher risk of a fall and thus a higher treatment priority. These sessions can help reveal pertinent medical or social impact issues not previously reported.

Electronic Medical Records

Creating software that can integrate into the electronic health record and automatically flag drugs that might cause falls and measure the potential of contributing to fall-risk. Having this information in the medical record would provide comprehensive medical information to the entire health care team.

UB Students Lead the Way for Passage of Student Immunizer Bill

BY GABE DIMAIO

Thanks to students in UB's School of Pharmacy and Pharmaceutical Sciences, New York now joins other states that allow pharmacy interns to administer certain immunizations under the supervision of a certified pharmacist.

As of December 2018, pharmacy students who have received their intern permit and met specific training requirements can now administer flu immunizations in addition to those to prevent pneumococcal disease, meningococcal disease, shingles, tetanus, diphtheria and pertussis disease. The pharmacy intern may only give these vaccinations under the direct supervision of a licensed pharmacist with a certification to give immunizations.

There are several benefits to this. Giving interns this authorization will increase overall immunization rates and thus keep more people out of the hospital and, in the long term, reduce health care costs in New York.

But for the hard work and advocacy of UB students, this might not have happened. Students Kevin Lavery (PharmD/MBA '19) and Kelsey Gregoire (PharmD '18) realized that most of their contemporaries in the vast majority of other states were allowed to give vaccinations.

"This became growingly frustrating for us, as students who were striving to develop our skills as pharmacy interns prior to becoming a licensed professional," says Lavery. "There were many students who were leaving New York in their fourth professional year to complete experiential rotations in other states that allowed them to exercise these skills."

Indeed, in many other states, students with a certified intern permit can provide immunizations under the supervision of a licensed pharmacist. Why not in New York? Lavery and Gregoire wondered. They decided to take up the mantle and began researching the issues. As part of this effort, they contacted law professors and boards of pharmacy in other states to learn about current legislation and then drafted a resolution.

In 2016, they presented the proposal at the Annual Meeting of the Pharmacists Society for the State of New York, Inc. (PSSNY). This body agreed to advocate for the measure to the New York State Board of Pharmacy and for the state legislature to adopt the resulting legislation. Students also made the case directly to members of the State Assembly and State Senate. This led to the passage of legislation allowing qualified pharmacy students to give immunizations.



Kelsey Gregoire and Kevin Lavery, recipients of the 2019 Pharmacists Association of Western New York Community Service Award for their advocacy work on the student immunizer bill

"Finally, in late 2018, the state legislature realized this was good for public health. As they understood other health care students could vaccinate, so should well-trained pharmacy interns," says Karl Fiebelkorn (BS '78, MBA '88), senior associate dean for student, professional and community affairs. "That's how you learn."

Fiebelkorn touts the accomplishment of Lavery and Gregoire. He says they are like many UB pharmacy students, who for decades have received leadership training through the PharmD curriculum and involvement in organizations such as the Pharmacists Association of Western New York (PAWNY) and PSSNY.

"They were credited statewide ... it was put in the statewide journals that they were the impetus that started this," Fiebelkorn adds. "They received quite a bit of praise for that."

For his part, Lavery says that it's been extremely rewarding to directly impact the future of the pharmacy profession, especially where public health is sure to benefit.

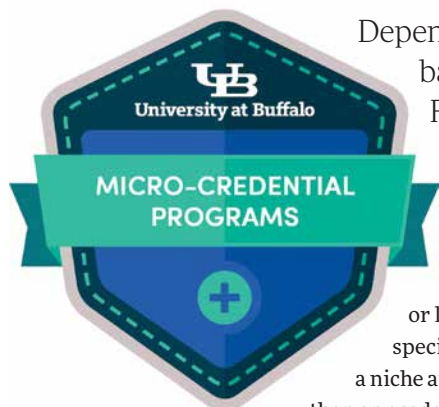
"To have tangible experience on successful grassroots advocacy like this is extremely fulfilling," he says. "It's something I hope to share with my family many years down the road."

"To have tangible experience on successful grassroots advocacy like this is extremely fulfilling."

Kevin Lavery, PharmD/MBA '19

Micro-Credentials: Flexible and Customizable Educational Experiences

BY GABE DIMAIO



Depending on your generation, you can liken micro-credentials to the merit badges that Boy Scouts get for mastering certain skills, the achievements Fitbit users earn for their steps, or the achievements gamers unlock for the havoc they wreak in Call of Duty.

A micro-credential is official recognition a student has mastered a proscribed series of classes and/or learning experiences. They are very specific and let students drill down into a niche area of interests. Narrower in scope than an academic minor or certificate program, a micro-credential offers students a unique opportunity to differentiate themselves, elevating them for future job opportunities. Without adding more time or cost in to degree completion a micro-credential helps students distinguish themselves from their peers academically and add to their professional *bona fides*.

Recognition of successful completion of a micro-credential program comes in the form of a digital badge, which is an icon a student can affix to digital transcripts, digital resumes, social media accounts, e-portfolios and email signature blocks. When a potential employer clicks on the badge, verifiable metadata easily provides information on the micro-credential including: institution, award date, student's work, rubrics and other course information.

In its commitment to serve students with these flexible education experiences, UB offers a growing menu of for-credit and non-credit micro-credentials. The for-credit microcredential programs differ from their non-credit

cousins in that they have been evaluated for their ability to be transferred or combined for use in a credit-bearing program. Students taking a for-credit program also receive a notation in their transcript. Depending on the program, learning experiences are taught in-person, online or a hybrid.

"I would recommend any student, no matter where they are in the program, take a look at micro-credentials," says Kory Zelen (PharmD, '20). "No matter what the concentration is, it's a way to help differentiate themselves from all the other graduates."

Clinical Pharmacy Research

Zelen is in the Clinical Pharmacy Research micro-credential program, one of four offered by the school.

This micro-credential is an in-person, for-credit program taken by third or fourth year PharmD students with a minimum 3.0 GPA. The course of study centers on pharmacy clinical and translational research and, with the guidance of a mentor, students write a proposal, conduct and then defend their supporting research. Along with developing critical thinking and problem solving, the program offers students skills to conduct basic research.

"I thought taking classes alongside research was a nice compliment to each other," says Zelen. "You're learning



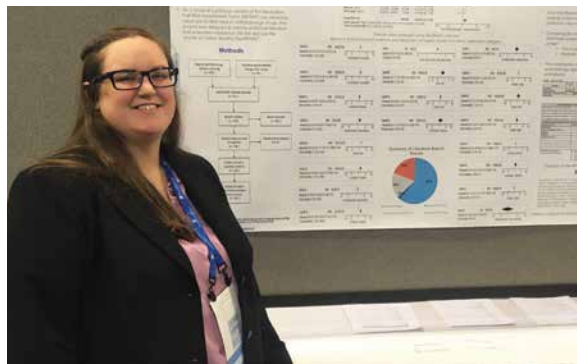
2019 Clinical Pharmacy Research graduates

things in the classroom that go beyond your normal curriculum. You're also getting your hands dirty doing bench research and getting a well-rounded experience."

Calvin Meaney (PharmD '11), clinical associate professor, pharmacy practice, says students learn study designs specific to clinical and translational pharmacology. In addition, they learn statistical and mathematical methods for characterizing pharmacokinetics and pharmacodynamics along with database development with emphasis on data collection and quality control.

"The allure for a lot of the students is they know they're interested in post-graduate training" says Meaney, who is program co-director program along with Brian Tsuji, professor, pharmacy practice. "This is a good mechanism to develop those skills and to show programs they are applying to that they've put in the extra work and effort as a pharmacy student."

Pharmacy Scholarship, Education, Leadership (Scholars Program)



Scholars Program student Mary Hejna presenting at the 2018 American Society of Health-Systems Pharmacists Midyear Meeting

The Scholars micro-credential is a for-credit program open to PharmD students with a minimum 3.5 GPA and a history of involvement with professional organizations. Erin Slazak (PharmD '04), clinical assistant professor, pharmacy practice, is its director.

A micro-credential offers students a unique opportunity to differentiate themselves, elevating them for future job opportunities.

With the guidance of a mentor, the students working on this micro-credential will build the necessary skills to become a leader in pharmacy and pharmaceutical sciences. That includes experiences in clinical practice, teaching and scholarship. As part of the program, students submit their scholarly work for publication and present that work at a state or national pharmacy meeting.

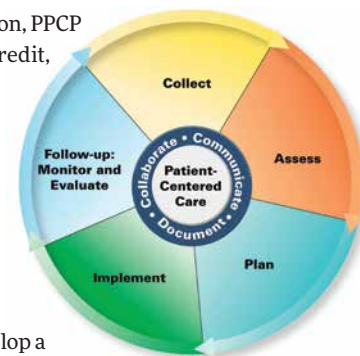
the program, students submit their scholarly work for publication and present that work at a state or national pharmacy meeting.

"I am very interested in completing a residency," says Mary Hejna (PharmD '20). "The scholars program helps you to develop your skills to be a good residency candidate." After residency, Hejna hopes to ultimately become a clinical pharmacist and work with geriatric patients. She learned about micro-credentials while taking a class taught by Robert Wahler (PharmD '00), clinical associate professor, pharmacy practice and director of the Application of the Pharmacists' Patient Care Process micro-credential program.

Pharmacists' Patient Care Process (PPCP)

Under Wahler's direction, PPCP has evolved into a noncredit, hybrid course with instruction taken both online and in-person and is open to students in the Doctor of Pharmacy program and is a standardized, five-step process that helps pharmacists develop a medication management plan for

patients, regardless of the setting. Aside from competency in PPCP, this micro-credential will help students develop skills in problem-solving, communications, collaboration and professionalism to ensure consistency in pharmacy led delivery of patient care.



Pharmacometric Software Series

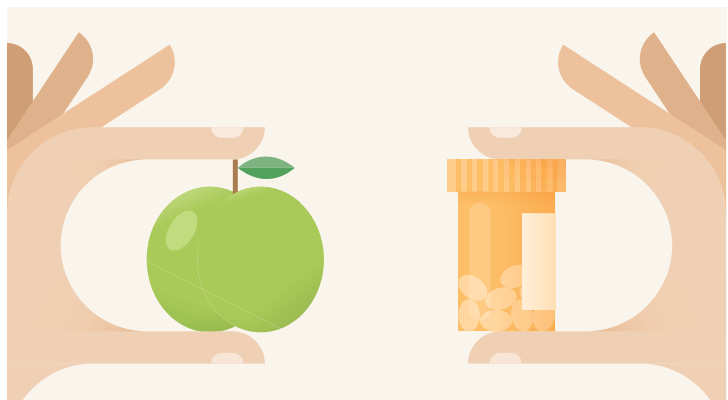
This graduate level micro-credential in the Department of Pharmaceutical Sciences is noncredit program and offers a series of pharmacometric software program workshops used in data analysis and computer modeling that are vital to the industry. Participants engage in PK/PD data analysis such as simulation, parameter estimation, noncompartmental analysis, study design and bioequivalence. In addition to acquiring practical knowledge, the program helps participants develop problem-solving skills. Wojciech Krzyzanski, associate professor, pharmaceutical sciences, is its director.

Micro-credentials are still relatively new, and these four programs in the School of Pharmacy and Pharmaceutical Sciences are the vanguard of what will be offered in the future. Their flexibility and customizability promise to change the way we educate ourselves.

More information about micro-credentials can be found at buffalo.edu/micro-credentials.

The Healing Properties of Food BY KARA SWEET

“Let food be thy medicine and medicine be thy food.” —Hippocrates



Red wine to fight depression

New research conducted by Ying Xu, PhD, research associate professor in the Department of Pharmaceutical Sciences, has revealed that resveratrol, a plant compound found in red wine, displays anti-stress effects by blocking the expression of an enzyme related to the control of stress in the brain.

The study’s findings were published in the July 2019 journal *Neuropharmacology*.

While research has identified resveratrol to have antidepressant effects, the compound’s relationship to phosphodiesterase 4 (PDE4), an enzyme influenced by the stress hormone

corticosterone by inhibiting the expression of PDE4.

The results of this research will lay the groundwork for the use of the compound in novel antidepressants. “Resveratrol may be an effective alternative to drugs for treating patients suffering from depression and anxiety disorders,” Xu says.

Vegetables to fight fatigue in MS

A pilot study led by Murali Ramanathan, PhD, professor in the Department of Pharmaceutical Sciences, found that higher levels of HDL cholesterol—also known as

“good cholesterol”—may improve fatigue in multiple sclerosis patients.

Fatigue is a frequent and debilitating symptom for people with multiple sclerosis and has limited treatment options. The medications used to treat this fatigue often come with unwanted side effects.

The study, published in the June 2019 journal *PLOS ONE*, followed 18 multiple sclerosis patients over the course of a year who were placed on a diet high in fruits and vegetables. The dietary change was also accompanied by a home-based exercise program, neuromuscular electrical stimulation, meditation and massage. Participants reported a noticeable reduction in fatigue, which researchers attributed to an increase in HDL.

“Higher levels of HDL had the greatest impact on fatigue,” Ramanathan says. “Good cholesterol plays a critical role in stimulating glucose uptake and increasing respiration in cells to improve physical performance and muscle strength.”

The results provide the basis for a larger study that could examine the effects of metabolic changes on fatigue and help guide future fatigue treatment decisions.

New Master’s Degree Targets Personalized Drug Therapy

BY KARA SWEET

The University at Buffalo School of Pharmacy and Pharmaceutical Sciences now offers an innovative new master’s degree program in pharmacometrics and personalized pharmacotherapy.

With the fast-paced advancements in personalized medicine, there is a growing need for highly skilled pharmacometricians to fulfill critical roles in drug discovery and development in pharmaceutical industries, regulatory agencies and academia. UB’s novel program is one of only a few in the country providing this evidence-based instruction in drug therapy optimization.

“This is a highly innovative program that draws on the strengths of the department and school,” says Dean James M. O’Donnell, PhD. “Advanced training in pharmacometric principles and approaches provides an excellent foundation for those in academia or industry interested in personalized pharmacotherapy.”

The curriculum combines conceptual training with hands-on computational training in the integration of health and biomedical data, allowing students to partner with internationally renowned faculty in high-level research and garner real-world job experience while still completing coursework.

Graduates of the program will have the skills necessary to deliver precision medicine and individualized therapies.

The fall 2019 inaugural class comprised 11 students, far surpassing initial enrollment expectations.

“With the additional faculty being hired through the Empire Innovation and Disciplinary Excellence awards and the growth of computational needs of the pharmaceutical industry, this program will likely expand further in the future,” says SUNY Distinguished Professor of Pharmaceutical Sciences and Program Director William Jusko (BS ’65 & PhD ’70).

Novel Academic and Industrial Collaboration Brings New Hope to Alzheimer's Patients

BY KARA SWEET

A research collaboration between the University at Buffalo and the biotechnology company Tetra Therapeutics has led to the development of a new drug that may protect against the negative effects of Alzheimer's disease.

The study, published in *The Journal of Pharmacology and Experimental Therapeutics*, was led by Ying Xu, PhD, research associate professor in the Department of Pharmaceutical Sciences; and James M. O'Donnell, PhD, dean and professor, Department of Pharmaceutical Sciences. Mark E. Gurney, PhD, chairman and chief executive officer of Tetra Therapeutics, also collaborated on the research.

The new drug...was found to be capable of activating multiple biological mechanisms that protect the brain."

In Alzheimer's disease, a specific protein, amyloid beta, exists that is toxic to nerve cells, which results in memory loss, nerve damage and other biochemical impairments. The new drug, called BPN14770, was found to be capable of activating multiple biological mechanisms that protect the

brain from these disease effects.

"Developing effective drugs for memory deficits associated with Alzheimer's disease has been challenging," says O'Donnell. "BPN14770 works by a novel mechanism to increase cyclic adenosine monophosphate (cAMP) signaling in the brain."

Indeed, cAMP has numerous beneficial functions, including improved memory. By inhibiting the PDE4D gene, BPN14770 increases cAMP signaling in the brain, which ultimately protects against the toxic effects of amyloid beta.

The benefits of BPN14770 could also translate to treatments for those with Fragile X syndrome, developmental disabilities and schizophrenia.

"Such observations imply that Alzheimer's pathology can be tolerated by the brain to some

extent due to compensatory mechanisms operating at the cellular and synaptic levels," says Xu.

The research was supported by the National Institutes of Health's Blueprint Neurotherapeutics Network through the National Institute of Neurological Disorders and Stroke, National Institute on Aging and National Institute of Mental Health.

Tetra Therapeutics is currently conducting Phase 2 studies of BPN14770 in patients with early Alzheimer's and adults with Fragile X syndrome. Results are expected in summer 2020.



Ying Xu, PhD, in her lab

2019 Grads Join Rutgers Fellowship Program

BY KARA SWEET

Jennifer Han (PharmD '19) and Anil Paul Melathe (PharmD '19) were accepted into the Ernest Mario School of Pharmacy's postdoctoral Rutgers Pharmaceutical Industry Fellowship (RPTF) Program.

The industry-based program is designed for individuals with a Doctorate of Pharmacy to further their experience in the pharmaceutical industry through work experience and clinical research partners.

Han is a clinical pharmacology/pharmacokinetic sciences fellow at the Novartis Institutes of BioMedical Research, where she supports all phases of drug development, from discovery to post-marketing.

"As an aspiring clinical pharmacologist, this program provides the training and support to gain expertise in clinical pharmacology and development," Han says.

Melathe is a U.S. Oncology Marketing postdoctoral fellow at Bayer Pharmaceuticals in Whippany, N.J. As a member of the brand team, he serves an ambassador for external facing products. He attributes his education at UB SPPS for preparing him for this role.

"UB School of Pharmacy and Pharmaceutical

Sciences gave me the opportunity to become clinically strong through a rigorous curriculum and to build a foundation for future success in a nontraditional pharmacist role," Melathe says.

The industry-based program is designed to further experience in the pharmaceutical industry through work experience and clinical research partners.



Jennifer Han (PharmD '19)



Anil Paul Melathe (PharmD '19)

PharmD/MBA Students Named Western New York Prosperity Fellows

BY KARA SWEET

Four University at Buffalo PharmD/MBA students were named 2019-20 Western New York Prosperity Fellows.

The fellowships are made possible through support from the Prentice Family Foundation and assist students who are actively preparing for careers that further economic growth and

development in the region.

Each fellow is awarded scholarship and internship support for an academic year, based on financial need. Paid, credit-bearing internships assist fellows in acquiring both academic and practical experiences in their intended professions. Fellows are given the opportunity to intern in their chosen fields

of interest, in which they work alongside and are mentored by leaders in upper-level management.

"This fellowship is helping me in ways I couldn't imagine," says Kathryn Gentz (PharmD/MBA '22). "The ceiling for my career aspirations feels limitless now."



Kathryn Gentz (PharmD/MBA '22)
Career Focus: Marketing and women's health



Peter Okoroza (BS '16 & PharmD/MBA '21)
Career Focus: Collaborative practice between pharmacists and physicians



Neel Patel (PharmD/MBA '20)
Career Focus: Drug manufacturing processes



Bryan Quinn (PharmD/MBA '20)
Career Focus: Managed care pharmacy and the community setting



2019 UB Celebration of Student Academic Excellence Honorees

Fulbright Program

Nabilia Ismail (PharmD '19)
Finalist

National Defense Science and Engineering Graduate Fellowship

Emily Bonacquisti, Pharmaceutical Sciences
Nominee
Natalie Smith, Pharmaceutical Sciences
Nominee

National Science Foundation Graduate Research Fellowship Program

Emily Bonacquisti, Pharmaceutical Sciences
Honorable Mention

UB Award for Excellence in Research, Scholarship and Creativity

Pharmaceutical Sciences
Undergraduate Program
Mairead Heavey (BS '19)
Mokshada Kumar (PhD candidate)
Shufang Liu (PhD candidate)
Dominique Weeks (BS '19)

Pharmaceutical Sciences Graduate Program
Amy Intini (BS '18 & MS '19)

UB Students Prepare and Educate for Lifesaving Interventions

BY REBECCA BRIERLEY

Rho-Chi Honor Society students have always been thought of as leaders who offer tutoring and mentoring to students in academic need. However, to a dedicated group of Rho Chi students, academic support was not enough. Over the past two years, Rho Chi has participated in Erie County Department of Health's (ECDOH) Opioid Overdose Prevention "Train the Trainer" program. In this initiative, ECDOH representatives prepare students on how to recognize and respond to an opioid overdose incident—the students then take what they've learned to educate others, specifically other pharmacy and UB health sciences students.

During this two and a half-hour ECDOH training forum, students learn to recognize the signs and symptoms of opioid overdose, take appropriate actions to save someone from an opioid overdose and train in the proper administration of naloxone to reverse a possible overdose. At program completion, students receive a certificate attesting to their training in opioid overdose prevention, including the use of intranasal naloxone to prevent death from an opioid overdose.

As the opioid epidemic becomes more rampant throughout the country and in Western New York, Rho Chi believes that empowering UB pharmacy students as trainers of naloxone administration is part of their duty as future health care professionals. Melissa Fan, Rho Chi secretary, emphasizes the importance of their outreach. "With the availability of naloxone in the community pharmacy setting, pharmacists and pharmacy students are at the forefront of

tackling the opioid epidemic," she says. "It is our responsibility as health care providers to increase awareness of naloxone accessibility, identify signs of opioid overdose and administer naloxone when needed." She believes the next steps could include naloxone training as part of continuing education requirements for health care professionals.

Within the PharmD curriculum, students are presented with staggering statistics regarding opioid abuse, so the relationship between Rho Chi and the ECDOH is very important. By working closely with ECDOH, they will be able to conduct their own naloxone training

sessions in the community and at other UB health care professional schools. So far, Rho Chi has trained 90+ pharmacy students and a handful of UB physical therapy students. Future training sessions include School of Public Health and Health Professions students with a long-term goal of training all health sciences students and ensuring that

90+

PharmD students trained in naloxone delivery by Rho Chi.

this important outreach program is known across campus.

Fan states, "Although this is only a small part of the battle against opioid overdose, every effort that we can make to educate our students and community on this epidemic is a significant step in the right direction."



Richard O'Brocta

Making Connections in Experiential Education

BY KARA SWEET

Richard O'Brocta, director of experiential education, loves making connections—with colleagues past and present, as well as with students and preceptors.

This passion for building relationships is what has driven his pharmacy career since he started as an intern at West Drug Store in his hometown of Dunkirk, N.Y. That led to four years serving as a pharmacist in the U.S. Air Force, where he gained valuable leadership skills.

While working at Olean General Hospital, first as a clinical pharmacist, then as director of pharmacy, O'Brocta got involved with teaching University at Buffalo medical students. This interprofessional work didn't go unnoticed—he was recruited to help launch the Lake Erie College of Osteopathic Medicine

(LECOM) School of Pharmacy in Erie, Pa.

At LECOM, he got more involved in pharmacy curriculum, in particular, the integration of experiential education. This provided him with a pathway to St. John Fisher College School of Pharmacy in Rochester, N.Y., then South University School of Pharmacy in Savannah, Ga. With each new role, he acquired more and more connections and became a resource for his fellow pharmacists.

"One consistent thing I've been able to do in my career is help others in my profession," O'Brocta says. "I think that's very important in this field."

O'Brocta was hired as the school's director of experiential education in 2019. Not surprisingly, his goal at UB is to enhance and expand relationships, creating an environment where students have the best learning experience possible.

"Assessment of data and getting input from everyone—preceptors, students, faculty—will foster continuous quality improvement and prepare our students for the future of pharmacy," he says.

"This is a really dynamic school and I'm very happy to be a part of it."



William Jusko

A Lifetime of Scholarship in Pharmaceutical Sciences

BY KARA SWEET

The year 2019 was one of leadership and productivity for SUNY Distinguished Professor and renowned pharmaceutical scientist William Jusko (BS '65 & PhD '70).

He was honored for his outstanding lifetime career achievements in pharmacometrics with the Lewis B. Sheiner Lecturer Award. This award is the highest recognition bestowed by the International Society of Pharmacometrics (ISoP).

Jusko studies the disposition and pharmacological effects of drugs and the optimization of dosing for immunosuppressive, anti-diabetic and cancer treatments. His work has led to significant advances in mathematical and computer modeling of the time-course of events following drug dosing.

To further expand his research in drug effects on the body, Jusko received a \$2.9 million Maximizing Investigators' Research Award (MIRA) from the National Institute of General Medical Sciences, one of the National Institutes of Health. The MIRA program provides highly prolific researchers with a stable funding environment that allows for improved productivity to facilitate nimble, ambitious and creative research.

The five-year study will examine corticosteroid effects on genomic, metabolic, pharmacologic and physiologic responses in normal and arthritic animal models. "Our interdisciplinary collaboration offers the imagination and insight necessary to recognize new principles that emerge and underlie the complexities of how drugs, hormones and natural compounds work and

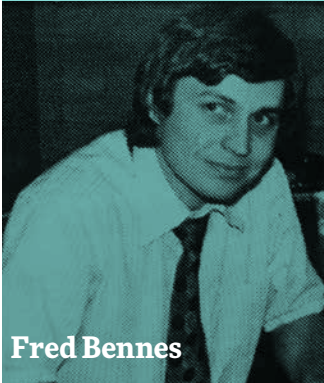
interact in the body," Jusko says.

Jusko is also director of the UB Center of Excellence in Pharmacokinetics and Pharmacodynamics and is a fellow of the American College of Clinical Pharmacy, American Association of Pharmaceutical Scientists, American Association for the Advancement of Science and ISoP.

His work has led to significant advances in mathematical and computer modeling of the time-course of events following drug dosing.



Robert Cooper



Fred Bennes



Milo Gibaldi



Robert Gumtow



Gerhard Levy

Memorializing Past Faculty Leaders

BY REBECCA BRIERLEY

Strong faculty leadership is a tenet of our school. The knowledge and guidance of these past faculty leaders impacted thousands of UB SPPS students. In celebration of these individuals, you will find labs, classrooms and other school-wide areas dedicated to recognizing their significant contributions and continued impact on our students and the profession of pharmacy.

New Memorials

Robert Cooper

Robert Cooper, professor, pharmacy practice, was a member of the faculty from 1967-1995 and oversaw the professional practice lab and the Office of Student Affairs. In his honor, a portrait and memorial plaque was recently placed near the Professional Practice Laboratory. Because of his unique and empathetic teaching style, the 1975, 1983 and 1995 yearbooks were dedicated to him and the 1996 yearbook included a memorial page in his honor.

Fred Bennes

Fred Bennes, clinical professor, pharmacy practice, was a member of the faculty from 1974-2010 and taught a variety of classes including pharmacotherapeutics and patient assessment. In his honor, a memorial photo collage was recently placed near the model pharmacy and patient assessment rooms. Bennes is remembered for his quick wit, voracious appetite for knowledge, and his love of teaching, family and friends.

In addition to these recently placed memorials, we have memorial spaces throughout the school to pay tribute to the following scholarly and educational leaders:

Milo Gibaldi Computer Lab

Milo Gibaldi was a professor of pharmaceutics from 1966-1978. As a pioneering researcher, he was a leader in the areas of biopharmaceutics and pharmacokinetics, and in 1972 he established the first Clinical Pharmacokinetics Laboratory at Millard Fillmore Hospital. He was an elected member of the National Academy of Medicine, National Academy of Science.

Robert Gumtow Library

Robert Gumtow began teaching at the school in 1962 and was an assistant professor of pharmacy from 1970-1994. He endured many physical challenges and these life obstacles taught him compassion and perseverance in his approach to teaching, mentorship, scholarship and health care.

Gerhard Levy Seminar Room

Gerhard Levy was a professor of pharmaceutics from 1958-2000 and is widely considered the “father of pharmaceutical sciences” for his groundbreaking work in pharmacokinetics, biopharmaceutics and pharmacodynamics. In 1978, he received the Høst Madsen Medal from the International Pharmaceutical Federation, and he was the first pharmacist named to the National Academy of Medicine (formerly the National Institute of Medicine, National Academy of Science) in 1980.

Recognizing Excellence

These faculty and staff members were recognized for their leadership and pioneering approaches to education and research in 2019



Joseph Balthasar (BS '91, PhD '96), professor, pharmaceutical sciences, was appointed as the University at Buffalo's executive director of research initiatives.



Karl Fiebelkorn (BS '78), senior associate dean for student, professional and community affairs, received a 2019 State University of New York (SUNY) Chancellor's Award for Excellence in Faculty Service.



Kristin Gniazdowski, EdM, associate dean, resource management, received a 2019 State University of New York (SUNY) Chancellor's Award for Excellence in Professional Service.



William Jusko (BS '65 & PhD '70), SUNY Distinguished Professor of Pharmaceutical Sciences, is the 2019 recipient of the Lewis B. Sheiner Lecturer Award from the International Society of Pharmacometrics. Jusko also received a \$2.9 million Maximizing Investigators' Research Award program from the National Institutes of Health. (See page 16 for additional information.)



William Prescott (PharmD '02), clinical professor and chair, pharmacy practice, has been selected as a fellow in the 2019-2020 Mid-American Conference Academic Leadership Development Program.



Sathy Balu-Iyer, PhD, professor, pharmaceutical sciences, was appointed as the school's associate dean for research.



Javier Blanco, PhD, professor, pharmaceutical sciences, received a \$438,000 R21 grant from the National Cancer Institute to explore the prevention of drug-related toxicity in children with Down syndrome and acute myeloid leukemia.



Jun Qu, PhD, professor, pharmaceutical sciences, received a 2019 University at Buffalo Exceptional Scholar Award for Sustained Achievement.



Jason Sprowl, PhD, assistant professor, pharmaceutical sciences, received a 2019 New Investigator Award from the American Association of Colleges of Pharmacy.

Remembering Julie Kopfer



In October, we lost a treasured colleague and dear friend, Julie Kopfer.

For nine years, Julie worked as a program coordinator in the Office of Continuing Education, helping

to drive the school's continuing education initiatives, and always exemplifying the highest levels of dedication and teamwork.

Marsha Nelson, director of the Office of Continuing Education, says Kopfer will be remembered for her generous spirit. "She was the first to volunteer when there was a need for any school event, and working with the students and the community was at her core."

Outside of work, Kopfer volunteered for the March of Dimes, Juvenile Diabetes Research Foundation and Kidney Foundation of Western New York. She also held leadership roles in the Buffalo Niagara chapter of the Public Relations Society of America.

"We will miss her bright spirit and kind heart," says William Prescott (PharmD '02), interim chair, Department of Pharmacy Practice.

Reunion 2019: A Time to Reconnect

BY KARA SWEET

Celebrating their reunion in 2019 were the classes of 1959, 1969, 1974, 1979, 1984, 1989, 1994, 1999, 2004, 2009 and 2014.

Reunion Weekend activities included a continuing education program on diabetes, tours of the Pharmacy Building, a walking tour of downtown Buffalo mansions and a cocktail reception and dinner at the Embassy Suites. Thank you to all alumni who attended and special thanks to all those who assisted as class representatives.*



Standing: Paul Myka, Robert Tompkins, Joseph Voelkl, Paul Scavone,* Leonard Rosokoff,* Sanford Rosenberg,* Gary Treger, Mark Rosenfeld* Seated: JoAnn (Giambelluca) Skaros, Joan (Kurch) Hector, Carol Fenlon-Gress, Rosemary (Crimaldi) Madejski*



L-R: John Proctor, Leon Kuczumski, Louise (Gelbrecht) Cooper,* Donald Banas, Patricia (Bell) Hewitt, Dennis Gawronski (Not pictured: Richard Dobiesz*)



Margaret (Buchanan) Johnson,* Dale Cary, Tina (Li) Fiebelkorn,* Randall Smith, Cindy (Kaplan) Bennes, Kenneth Nizialek, Daphen (Moy) Shum, Christine (Alberici) Nizialek, Andrea (Adam) Link, Lynn (Forster) Daly, Don Daly, Karl Donn*



THE HISTORY BEHIND
NOVEL ITEMS IN OUR
SCHOOL'S APOTHECARY

The Emperor of Elixir

BY KARA SWEET

Ray Vaughn Pierce was nicknamed "The Prince of Quacks" and "The Emperor of Elixir." A graduate of The Eclectic Medical College in Cincinnati, Ohio, he moved to Buffalo, N.Y., in 1867 and began to manufacture a wide array of herbal products, most of them geared toward "female conditions" such as weakness and nervousness, and nearly all of them containing opium and alcohol.

A master of marketing and advertising, Pierce ran ads in newspapers, on billboards and on the sides of barns. By the early 1900s, nearly one million of his products were sold,

all of them manufactured in Buffalo. His publication "The People's Common Sense Medical Advisor," considered somewhat of a predecessor to the Physicians' Desk Reference, sold more than two million copies. (It also served as a clever way to further promote his products!)

Pierce used his charisma and popularity to earn a seat in the New York Senate from 1878-1879. He was also an elected member of the 46th United States Congress from 1879-1880. He died in 1914 in Florida, and is buried in Forest Lawn Cemetery in Buffalo.

Prior Paths to Pharmacy Remembered

BY: REBECCA BRIERLEY

In 2019, new honorary plaques were placed in the pharmacy school to pay tribute to our post-baccalaureate trailblazers

Post-Baccalaureate PharmD

Before the initiation of the PharmD degree in the early 2000's, practicing pharmacists or newly graduated pharmacy students with an interest in enhanced clinical pharmacy sought out the University at Buffalo School of Pharmacy's nationally renowned post-baccalaureate PharmD program. This two-year rigorous program, which began in the early 1970s, provided trainees with enhanced clinical and research training.

The post-bac PharmD program had 230 graduates in total and many are currently some of the most noted national and international pharmacy leaders across industry, academia and health care.

Among these leaders are many of our current faculty and adjunct professors including: Kathleen Tornatore '81, Gene Morse '83, Mark Sinnett '87, Charles Maponga '88, Terry Dunn '89, Curtis Haas '89, Denise Swiatek '96, Raymond Cha '99, Donald Mager '99, Robert Wahler '00 and Kimberly Zammit '00.

Kris Jordan, coordinator for Advanced Pharmacy Practice Experiences and former administrative assistant for the post-bac program remembers it fondly. "I began my career here in 1987 working with those students," she recalls. "It has been truly amazing to watch these individuals become the leaders that they are today. I am proud to have been a very small part of their lives for the two years that I worked with each of them".

“It has been truly amazing to watch these individuals become the leaders that they are today.”

Non-Traditional PharmD

After the conclusion of the post-bac PharmD, another degree option was added to bridge the gap for BS pharmacists to receive enhanced clinical training. From 2002-2006, the Non-Traditional PharmD program was offered. This two - three year program was offered during the evening to accommodate the schedules of busy practicing pharmacists.

The Non-Traditional PharmD program had 13 graduates who are also pharmacy leaders across the country. Current faculty adjunct professors who are graduates of our Non-Traditional program include: Tammie Lee Demler-Dodson '02, Daniel Guarasci '04 and Jeff Lombardo '04. As preeminent pharmacotherapy specialists, they are helping to shape delivery of health care.



1984

Tom Smith, Rachel (Spire) Smith,* John Krake



1994

Stephan Brand, Mojdeh Mozayani, Cynthia (Leidich) Lackie,* Christine (Topolski) Kirchman, Jodi (Jones) Selbig, Brian Burns



View more photos from our 2019 Reunion Weekend.

By the early 1900s, nearly **one million** of his products were sold, all of them manufactured in Buffalo



TOP 5 LIST

TOP 5 Musical GENRES

For Faculty and Staff

1. Pop
2. Alternative/indie
3. Classic rock
4. Country
5. Jazz

For Students

1. Pop
2. Rap/hip-hop
3. Alternative/indie
4. Heavy metal
5. Punk

Pharmacists on Ice



BY KARA SWEET

For several years in the late 1970s and early 1980s, the UB School of Pharmacy and Pharmaceutical Sciences had an intramural hockey team.

The team was established in 1975, with weekly practices taking place Saturday mornings at Tonawanda Twin Rinks at 1 a.m., the only time the ice was open. Games were held Tuesday nights against other intramural teams at UB.

Don Daly (BS '79) joined the team in 1977 and was the team captain for the 1978-79 season. "We recruited players and got a pretty decent team going," he says.

By 1979, the team was good. So good that they beat their main rival, the UB dental school, and captured the UB Hockey Intramural Championship title.

"It was a big deal for a smaller professional school like pharmacy to win an intermural league in a large university like UB," says Andrew DiLuca (BS '81), a member of the iconic 1978-79 team and captain of the 1981 team. "The USA beat Russia and also won the gold medal in the Olympics [in 1980], so hockey was more popular than ever."

The momentum continued for several years.

"In the 1979-80 season, we had a few guys from Canada, so we were a much better team," recalls Howie Levine (BS '80), who still plays the sport today.

Daly stopped playing hockey after he graduated, but kept his jersey, stick and helmet for nostalgia's sake.

"It wasn't like the Sabres taking the ice, but we sure had fun."



1979 UB Pharmacy Hockey Team

Local Independent Pharmacy: Main Street to Hollywood

BY: REBECCA BRIERLEY

The values that independent pharmacies bring to their communities are immeasurable: front-line health care provider, community leadership and, for one local pharmacy, the bright lights of Hollywood. This past summer, Akron Pharmacy in Akron, N.Y., owned by Chuck George (BS '72,) was featured in the filming of "A Quiet Place: Part II," an American horror film, hitting theaters in spring 2020.

George established Akron Pharmacy in 2002; it includes a gift shop showcasing many local products and employs 14 people whom George refers to as part of his extended family.

Over the summer of 2019, actor and director John Krasinski and his crew arrived in the small town of Akron to begin shooting. Akron's Main Street was transformed into a pre-apocalyptic horror set, with storefronts transformed to crumbling facades and the gift shop at George's Akron Pharmacy changed into a local store.

George states, "It was a great experience; the whole crew was in and out of our space, and I had the chance to meet Krasinski, his wife Emily Blunt and other members of the cast. [It was a] great opportunity for the Village of Akron! How often does a small independent pharmacy have the chance to be part of a major Hollywood movie?"

"A Quiet Place: Part II" gave Akron Pharmacy visibility on the national stage, but George knows the real pride accrues from the local community he serves. In a conversation, he gave us insights from his 28 years in retail pharmacy, with 17 of those years spent at Akron.

Reflections from a Community Pharmacist

Endless Rewards

"I have the opportunity to really get to know the majority of the people in the community, which is really rewarding and helps build a sense of confidence in the community. The

interactions I have with my patients and customers are not 'transactional.' They know me and I know them. They talk to me about their lives, kids and grandkids. I feel like they are a part of my family."

Community Pharmacy= Community Support

"A large part of owning a community pharmacy, especially in a small town, is your support and integration into all aspects of the community: working with the Chamber of Commerce, supporting local events and organizations such as Boy Scout Troops, charity golf tournaments and barbecue dinners. It's a great way to get to know the community you serve and allows the community to get to know you, too."

Advice to PharmD Students Interested in Independent Pharmacy

"Look at your target market area. What does the community look like? Are there other pharmacies nearby? Are there other health care providers in the area you could partner with? Understand you will need to be active in the community you will practice in. Be a good community steward and be prepared to work really hard, especially in the beginning. Long hours and long weeks are common, but the rewards are endless.

Always keep in mind, you are responsible for keeping a community healthy who otherwise may not have access to needed medication or health care counseling—and sometimes they'll just want a friend to have a cup of coffee with."



Director and actor John Krasinski and Chuck George



Chuck George at his pharmacy

"I have the opportunity to really get to know the majority of the people in the community, which is really rewarding and helps build a sense of confidence in the community."

Always Believed in Helping Others and Giving Back

Ronald Evens, BS '69, PharmD, thanks UB with support

BY S. A. UNGER



Ronald P. Evens, BS '69, PharmD, a nationally recognized leader in biotechnology development and marketing, has made a generous estate commitment to scholarships in the School of Pharmacy and Pharmaceutical Sciences. The Evens Family Scholarship, “established in order to increase financial aid available to worthy PharmD students,” will be distributed to awardees for each of their four years in pharmacy school.

Evens, who is semi-retired, has enjoyed a prolific career that began in academia and later dovetailed with exponential growth in the biotechnology industry, starting in the late 1980s.

For thirteen years, beginning in 1989, he was head of the Professional Services Department at Amgen. “When I began there, the biotechnology industry only had about 10 products on the market, compared to about 400 now,” says Evens, who played a role in the Amgen’s early expansion. His group supporting health care professionals grew from 4 to 144 staff over 10 years with a \$50 million budget.

“[T]he majority of my wealth I am giving back to society, to my profession and to education so that others can get a really good start in a really good program, like I had at UB.”

Prior to joining Amgen, Evens was associate director of clinical research and medical services at Bristol-Myers, conducting analgesic research. Before that he served in leadership positions in academia at the University of Texas at Austin, the University of Texas Center for Health Sciences at San Antonio, and at the University of Tennessee, where he was an associate professor and acting chair of

the Department of Pharmacy Practice. Currently, he consults with Tufts University in biotechnology and publishes his work.

In addition to his support for education, Evens has made substantial commitments to the disadvantaged in Buffalo, environmental causes and to the profession of pharmacy by establishing a future research program at the American College of Clinical Pharmacists.

A native of Tonawanda, NY, Evens grew up in a loving, but poor family. “My parents worked very hard, but I can remember being on welfare a few times when I was a child,” he recalls. “When it came to my education, I was on my own financially, but my parents always encouraged me and fostered in me an appreciation for education as an avenue to success.”

Evens made the best of his years at UB and has vivid memories of the “very challenging academic environment,” which he found stimulating, the friends he made and the superb mentors he had, including Kenneth Letcher, Gerhard Levy, Michael Schwartz and Milo Gibaldi. “I went to UB because it was my local state school,” he says. “I didn’t know it was a top five school, as was the University of Kentucky, where I did my PharmD and clinical residency training.”

Evens says he can’t think back on his years at UB in the 1960s without recalling the unrest on campus. “It was an era of rebellion,” he says. “Once, we had a major riot on the other end of campus while we were going to class. It was a crazy time, but we were a pretty dedicated group of students who worked really hard and played hard.”

For Evens, the concept of giving back — “passing forward,” as he calls it—is simple: “I have always believed in helping others, supporting others, because I came out of poverty. Through a lot of luck and some hard work, I’ve had success, but now I want to give back. My children will get something significant, but the majority of my wealth I am giving back to society, to my profession and to education so that others can get a really good start in a really good program, like I had at UB.”

SUPPORT



“I remember being so thankful because those little tablets allowed him to be with us.”

McKenna Butler

Dean James O'Donnell,
McKenna Butler and Kim O'Donnell

O'Donnell Family Scholarship Established

Inaugural recipient McKenna Butler exemplifies the purpose

BY S. A. UNGER

When James “Jim” O'Donnell, PhD, professor and dean of the School of Pharmacy and Pharmaceutical Sciences, and his wife, Kim, established the O'Donnell Family Scholarship, they could not have envisioned a more deserving inaugural recipient than McKenna Butler, a third-year PharmD student.

The O'Donnell Scholarship—which is awarded annually and includes a bequest commitment to fund a permanent endowment—is intended to promote excellence in research by providing support to a deserving PharmD student interested in research.

Butler, a native of Sayville, N.Y., on the south shore of Long Island, is the youngest of five children in a tight-knit family. As a child, she watched her father battle prostate cancer, a diagnosis he received when she was only two years old. “He was always going to doctor’s appointments, trying new chemotherapies,” Butler recalls. “I was about 14 when he enrolled in a clinical trial for a new oral regimen, and I remember being so thankful because those little tablets allowed him to be with us. Ever since then I’ve been fascinated by the pharmacy field and knew I wanted to be a pharmacist.”

In the years ahead, Butler hopes to complete an oncology pharmacy residency and pursue a career as a clinical pharmacy specialist. Currently, she is

working on a research project involving myeloma patients at Roswell Park Comprehensive Cancer Institute.

Sadly, Butler’s receipt of the O'Donnell Family Scholarship coincided with her father’s death in April 2019, but the support has only inspired her to give back in a similar way someday.

“I am so thankful to have been selected to receive this scholarship at this time,” says Butler. “I was able to meet Dr. and Mrs. O'Donnell recently, and they are such delightful and generous people who have made a great impact on my life. I am honored to be the first recipient of their scholarship, and I aspire to one day be in the position to pay it forward and continue to help students.”

The O'Donnells were very pleased to meet McKenna, as well. “She understands from her own experience how research closely coupled to patient care can lead to advances in the pharmaceutical sciences,” says Jim O'Donnell. “It is very meaningful to Kim and me to help McKenna and other students pursue their research interests.”

Kim O'Donnell says that she and her husband also hope to ease the debt burden assumed by many students today and “to free up some time for them to really absorb the process of being in school and not have to worry so much about where the money will come from to pay for it.”

The gifts described in these stories are part of Boldly Buffalo: The Campaign for UB. This university-wide campaign, launched publicly in April 2018, will raise \$650 million to deliver transformative changes for the public research university, Western New York and around the world. The School of Pharmacy and Pharmaceutical Sciences has reached 93% of its \$31 million goal. Learn more at buffalo.edu/campaign or contact our Office of Advancement at 716-645-3432.

**BOLDLY
BUFFALO**
THE CAMPAIGN FOR UB

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

Thomas Blanchard '61

Daniel '89 and Gayle Brazeau '89

Alex Cardoni '66

Raymond '82, '87 and Mary Anne Dannenhoffer '81, '87

Nina Doran '53

Ronald Evens '69

Joseph Figlow '70

Edward '52 and Jean Frank '54

Carol Gloff '75

Florence Ho '75 and Wing Fung

Ron '56 and Gail Isaacs

Rose Mary Madejski '59

Margaret Hempling McGlynn '82, '83

DeWitt Niles '62

James and Kimberly O'Donnell

Robert Ravin '57

Mario '76, '81 and Donna Rocci

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 University Advancement at (716) 645-3432 or visit our web site at pharmacy.buffalo.edu.

430

The number of current Hayes Society members across the university who have remembered UB in their will or through another deferred gift.

Honorary and Memorial Gifts

IN HONOR OF ALEXANDER AVERSANO '63

Paul and Paula Aversano
Anthony and Camille Passarella

IN MEMORY OF THOMAS J. BARDOS

Vitauts '61, '64, '74 and
Brigita Alks
Wayne and Lorraine Anderson
Maria Bardos
Bristol Myers Squibb Foundation
David '75 and Jane Chu '75
Joseph Dunn '81
Peter and Kathleen Forgach
William Glave
Thomas Kalman '68
Hung Le '73, '78 and Thai Nguyen
James Matson '73
Millennium Pharmaceuticals
Michael Perlman '82
A. Jere and Elma Solo
Agnes Szekeres
Robert '62, '66 and
Maureen Vince

IN MEMORY OF SAMUEL BURSUCK '34

Andrew and Bonnie Tangelos

IN MEMORY OF ROBERT COOPER

Elaine Cozzarin '69

IN MEMORY OF LORI ESCH '97

Andrew and Andrea Esch
Coraline Esch

IN MEMORY OF ALAN FORREST

John '88, '95 and Glenda Adams
Ahmed Amer
John Luzier and Aileen Brown '92
Julie Bullock
Certa USA Inc.
Robert '88 and Linda
DiCenzo '88
Cory Fominaya
Richard Gosch and Mark Shelton
Varsha Iyer
Mohamed Ahmed Kamal '01
Sunil Murthy and Gauri
Rao '11, '15
Charles Peloquin
Craig Rayner '00
Vanessa Stevens
Jennifer Thomas '90
Lance Wollenberg

IN MEMORY OF EDWARD HEMPLING '50

Margaret Hempling
McGlynn '82, '83

IN MEMORY OF GERHARD LEVY

Lewis '69 and Irma Amsel
Lisa Benincosa '93
Enhanced Pharmacodynamics
Leung and Sun Mi Fung
Don Mager '91, '00
Michael Mayershohn '71
William and Marilyn Morris '84
Scott VanWart '96, '04, '14
Howard '71 and Anita Weintraub
Svein Oie '75 and
Barbara Woodruff
Xu Zhu '17
Xiaochen Zhao '16

IN MEMORY OF MICHAEL MUNELLA

Kris Jordan

IN MEMORY OF LESTER ROBINSON

Lawrence Hargrave '69
and Brenda Lee

IN MEMORY OF SALVATORE AND MARIA TORRE

Nelson '56 and Joyce Torre

IN MEMORY OF PHOENIX YU

Margaret Yang '75

Donor Honor Roll

CLASS OF 1948

PATRON
Ruth Lindblad

CLASS OF 1951

PATRON
Samuel Ferrara
Kathleen Monachino

CLASS OF 1952

WILLIS G. GREGORY SOCIETY

GUARDIAN
Gerald Hooley

LEADER

Milner Forster
Zakar Shakarjian
Joseph Serman

ADVOCATE

Gerald Saks

PATRON

Robert Erisman

CLASS OF 1953

WILLIS G. GREGORY SOCIETY

LEADER
Nina Doran

PATRON

David Fake
Frank Messoro

CLASS OF 1954

PATRON

Melvin Brothman
Seymour Kugel

CLASS OF 1955

WILLIS G. GREGORY SOCIETY

LEADER

Sherwood Deutsch
Irving Sultz

CLASS OF 1956

WILLIS G. GREGORY SOCIETY

GUARDIAN

Ronald Isaacs

LEADER

Joseph Chazan
Algirdas Gamziukas
Helaine Gamziukas
Nelson Torre

PATRON

Anne Allen

CLASS OF 1957

WILLIS G. GREGORY SOCIETY

GUARDIAN

Bruce Moden

PATRON

Anthony Barone

CLASS OF 1958

PATRON

Ardwin Block
Nelson Korus
Ralph McGarrity
Richard Polakoff

CLASS OF 1959

WILLIS G. GREGORY SOCIETY

GUARDIAN

Rose Mary Madejski

LEADER

Mark Rosenfeld
Joseph Voelkl

ADVOCATE

TPATRON

Arthur Comisar
David Hammond
Carlin Parish

CLASS OF 1960

WILLIS G. GREGORY SOCIETY

GUARDIAN

Margaret Quinn

PATRON

Janet Antkowiak
Angela Coniglio
Gertrude Corio
George Sciolino
Sandra Stanbridge
Michael Train

CLASS OF 1961

WILLIS G. GREGORY SOCIETY

LEADER

Vitauts Alks

PATRON

Symond Jacobson
William Schack

CLASS OF 1962

WILLIS G. GREGORY SOCIETY

GUARDIAN

Heather Ackley
Robert Vince

PATRON

John Whitehead

CLASS OF 1963

PATRON

Myra Bellavia
Gerald Bergman
Lincoln Conti
Robert GiaQuinto
C. Peter Goliber
Arthur Oleszkowski
Richard Reuning
Eleanor Scaffidi

CLASS OF 1964

WILLIS G. GREGORY SOCIETY

LEADER

Vitauts Alks

PATRON

Crescenzo Schettini

CLASS OF 1965

WILLIS G. GREGORY SOCIETY

GUARDIAN

Karen Pompei

LEADER

William Jusko

ADVOCATE

Chester Hejna

PATRON

David Sperling
Harold Vang

CLASS OF 1966

WILLIS G. GREGORY SOCIETY

GUARDIAN

Linda Edelman
Robert Vince

LEADER

Alex Cardoni

PATRON

Diane Mangus
Robert Vacca

CLASS OF 1967

WILLIS G. GREGORY SOCIETY

LEADER

Thomas Quinlan

PATRON

Reginald Ameele
Charles Bainbridge
Judith Kocher

CLASS OF 1968

PATRON

Carol Bainbridge
Richard Ersing
James Kowalski
Ronald Lamb
Philbert Monacelli
Gail Proctor
Richard Reuning
Joel Ross
David Schultz
Janet Whalen

Class of 1970, continued

Paul Schwartzmyer
Robert Van Every

CLASS OF 1971

WILLIS G. GREGORY SOCIETY

LEADER

Paul Grout
Michael Mayersohn
Howard Weintraub

PATRON

Barbara Finley
Virginia Fraboni
Stanley Szefer

CLASS OF 1972

PATRON

Elizabeth Murphy
Deborah Swartz

Giving to the University
at Buffalo in fiscal year
2019 was up by **11.7%**

CLASS OF 1969

WILLIS G. GREGORY SOCIETY

CHAMPION

Ronald Evens

LEADER

Lewis Amsel

PATRON

Elaine Cozzarin
Patricia Hewitt
Gary Zimmerman

CLASS OF 1970

WILLIS G. GREGORY SOCIETY

GUARDIAN

Joseph Figlow

LEADER

William Jusko

PATRON

Jeffrey Baldwin
William Glave
Mary Grillo
Gail Guzzo
Paul Piechalak

CLASS OF 1973

ADVOCATE

Paul Dalecki
Hung Le

PATRON

Marcia Dunham
Sik Seung Eng
James Matson
Thomas Nealon
Jerald Passer
Beth Resman-Targoff
Robert Wagner
Peter Wepplo

CLASS OF 1974

WILLIS G. GREGORY SOCIETY

LEADER

Vitauts Alks
George Lasezkay

PATRON

Faith Kaye
Stephen Liebowitz
Richard Posner
Wendy Pritchard
Algis Rudinkas
Ann Toscano

Donor Honor Roll *continued*

CLASS OF 1975

WILLIS G. GREGORY SOCIETY

GUARDIAN

C.K. David Chu
Jane Chu
Carol Gloff
Wai-Yung Ho
Mario Rocci
Margaret Yang

LEADER

Joseph Dunn
Henry Hu
Lawrence Kwok
Michael Levitt
Sue Marr
Edward McNiff
Svein Oie

PATRON

Barbara Edwards
Donna Hammond
Jeanne Lill
Linda Lombardi
Alfred Sirutis
David Smith
John Toscano
Tariq Veysoglu
Anita Vigorito

CLASS OF 1976

WILLIS G. GREGORY SOCIETY

GUARDIAN

Mario Rocci

LEADER

Joseph Balwierczak
Michael Jay
Edward McNiff

ADVOCATE

Karen Vitacolonna Falk

PATRON

Kathleen Cubera
Deborah Adson
Paula Falvey
Judy Robinson
Daniel Winters

CLASS OF 1977

WILLIS G. GREGORY SOCIETY

LEADER

Susan Clifford-Jay

ADVOCATE

Sum-Yee Woo

PATRON

Helen Abasute
Vincent Andolina
Paul Corey
Mary Ann Hallenbeck
David Schwanekamp

Class of 1977, continued

Michael Shakarjian
Jacob Utzig

CLASS OF 1978

WILLIS G. GREGORY SOCIETY

LEADER

Karl Fiebelkorn
George Lasezkay

ADVOCATE

Stanley Kent
Hung Le

PATRON

Bruce Sakowitz

CLASS OF 1979

WILLIS G. GREGORY SOCIETY

LEADER

Cindy Benes
Karl Donn
Tina Fiebelkorn

PATRON

Catherine Cmaylo
Beverly Combs
James Czajkowski
Barbara Kapsiak
Christopher Oravetz
James Panek
John Pieper

CLASS OF 1980

WILLIS G. GREGORY SOCIETY

GUARDIAN

Kenneth Dow

LEADER

Joseph Dunn
Craig Kirkwood
Gene Morse

ADVOCATE

Michael Darby

PATRON

Frances Badagnani
Frank Badagnani
Peter Chakos
Diana Clarke
Kimberly Destino
James Fitzgerald
Lynda Haberer
Sheryl Liedtke
Kathleen Mrozinski
Patricia Palumbo
Sandra Schifano
Thomas Streeter

CLASS OF 1981

WILLIS G. GREGORY SOCIETY

GUARDIAN

Mary Anne Dannenhoffer
Mario Rocci

CHAMPION

Michael Taylor

LEADER

Stephen Giroux
Elizabeth Ludwig
Walter Ludwig
Mark Stramaglia
Kathleen Tornatore

PATRON

Steven Chao
Mark Costanza
Andrew DiLuca
Gregory Kriel
Barry Martin
William McSkimming
James Millard
Ronald Schifano

CLASS OF 1982

WILLIS G. GREGORY SOCIETY

GUARDIAN

Margaret McGlynn

LEADER

Mark Celeste
Paul Ferris
Thomas Madejski
Marianne Simpson
Schulz

PATRON

Paul Cain
Francis Marracino
Cheryl Merrill
Michael Perlman
Chuilung Yang

CLASS OF 1983

WILLIS G. GREGORY SOCIETY

GUARDIAN

Alfonse Muto

LEADER

Joseph Balwierczak
James Ermer
Craig Kirkwood
Edward McNiff
Gene Morse
John Rodgers

ADVOCATE

Donald Fleming
Renee Fleming

PATRON

William Barclay
Debra Donnarumma

UB ranks **#31** among
public universities in
the United States.

Class of 1983, continued

Harvey Lisch
N. Chris Nwankwo
Mark Sinnett
James Spain

CLASS OF 1984

WILLIS G. GREGORY SOCIETY

GUARDIAN

Mary Anne Dannenhoffer

CHAMPION

Marilyn Morris

LEADER

James Baxter
Elizabeth Ludwig
Rachel Smith
Thomas Smith

ADVOCATE

Theresa Bianco
Michael Rossi

PATRON

Edward Bednarczyk
Matthew Buehler
Gregory Chase
Susan Garwood
Rosa Hill
John Leone
William Malenga
Joan Twarog

CLASS OF 1985

WILLIS G. GREGORY SOCIETY

LEADER

L. Jamie Baxter

ADVOCATE

David Milling

PATRON

Helen Abasute
Joseph Eppolito
Robert Garris
Daniel Koester
Christopher Messineo
Anne Ptak
Dean Salyer
Nadia Sefein
Anne Zajicek

CLASS OF 1986

WILLIS G. GREGORY SOCIETY

GUARDIAN

Angela East

LEADER

Brian Loucks

ADVOCATE

Janiece Aldinger

PATRON

Martin Burrano
Gregory Clark
Kathleen Gondek
Neal Green
LeRoy Hanchett
Marilou Hunt
Steven Kasper
Tamara Kozlowski
Alice Pien-Milgrom
Sarah Ronchetti
Anita Smith

CLASS OF 1987

WILLIS G. GREGORY SOCIETY

GUARDIAN

Mary Anne Dannenhoffer

LEADER

Sandra Hellwig

PATRON

Carolyn Kong
Beth Resman-Targoff
Mark Sinnett

CLASS OF 1988

WILLIS G. GREGORY SOCIETY

LEADER

James Ermer
Anonymous
James Tisdale

ADVOCATE

Elizabeth Bachert
Providence Morris

PATRON

John Adams
Michelle Callahan
Linda Di Cenzo
Robert Di Cenzo

Donor Honor Roll *continued*

Class of 1988, continued

Linda Equinozzi
 Andrea Hess
 Chrisanne Maldiner
 Stephen Piscitelli
 Evelyn Reda
 Vincent Reda
 Julie Smith
 Elaine Soldi
 Jennifer Stahl
 Craig Straley
 David Tober
 Suzanne Tober

CLASS OF 1989

WILLIS G. GREGORY SOCIETY

GUARDIAN

Hsiao-Hui Chow

CHAMPION

Daniel Brazeau
 Gayle Brazeau

PATRON

Tammy Hayes
 Nadine Johnson
 Ah-Ng Kong
 Michael Palone

CLASS OF 1990

WILLIS G. GREGORY SOCIETY

LEADER

James Baxter
 Stacy Johnson

PATRON

Andrea Hess
 Herman Ip
 Vicky Ip
 Mark Pattoli
 Stephen Piscitelli
 Barbara Race
 William Rose
 Jennifer Thomas
 Michelle Wyant-Seelig

CLASS OF 1991

WILLIS G. GREGORY SOCIETY

LEADER

Donald Mager

ADVOCATE

Amy Marie Brawdy-Carlo
 Wai Yu Loong

PATRON

Shaun Cobb
 Karen Mlodozieniec

CLASS OF 1992

WILLIS G. GREGORY SOCIETY

LEADER

Stephen Groth

PATRON

Paul Badore
 Aileen Bown
 Joseph Caezza
 Patrick Meek
 Catherine Reinard
 Joseph Saseen
 Kathleen Ziedins

CLASS OF 1993

PATRON

Darce Barnes
 Keary Dunn
 Steven Hansel
 Benjamin Koenig
 Donald Larson
 Thomas Siejka

CLASS OF 1994

WILLIS G. GREGORY SOCIETY

LEADER

Eric Bush
 Varun Garg

ADVOCATE

Elizabeth Bachert

PATRON

Kristi Leonard
 Janel Miles
 Peter Miles
 Mojdeh Mozayani
 Joseph Saseen
 Eric Thierman

CLASS OF 1995

ADVOCATE

Holly Kimko

PATRON

John Adams
 Janette Beikirch
 Jamie Belcastro
 Guoping Feng
 Eric Klein
 Shrikumar Nair
 Joseph Sidoti
 Alecia Thompson

CLASS OF 1996

WILLIS G. GREGORY SOCIETY

LEADER

Scott Vanwart

ADVOCATE

Jacqueline Cansdale

PATRON

Roderick Cardarelli
 Kit Cheng
 Julie Joyce
 Michele Spence
 Mohammad Tabrizi-Fard
 Stephen Warren
 Kristin White
 Adam Wychowski

CLASS OF 1997

PATRON

Danielle Banaszak
 Sheila Beurket
 Raymond Cha
 John DeAngelis
 Gretchen Heister
 Sarah McDowell
 Jonathan Rosen

CLASS OF 1998

WILLIS G. GREGORY SOCIETY

CHAMPION

Yu-Nien Tom Sun

PATRON

Amy Donihi
 Roxanne Fratezi
 Patricia Heary
 Renae Malek
 Michelle Mazingo
 Kelly Ruffner
 Dean Trzewieczynski
 Xin Wang

CLASS OF 1999

WILLIS G. GREGORY SOCIETY

CHAMPION

Anonymous

LEADER

Keith Wagner

PATRON

Abhijit Chakraborty
 Maria Dybala
 Megan Gruppe

CLASS OF 2000

WILLIS G. GREGORY SOCIETY

CHAMPION

Anonymous

LEADER

Donald Mager
 Keith Wagner

ADVOCATE

Craig Rayner

PATRON

Raymond Cha
 Maria Dybala
 Christie Pokrywczynski
 Robert Wahler

CLASS OF 2001

WILLIS G. GREGORY SOCIETY

GUARDIAN

Jean Jacob

LEADER

Margaret Hausler-McLean
 Mohamed Kamal

PATRON

Mandy Kou
 Kenneth Sansone

CLASS OF 2002

WILLIS G. GREGORY SOCIETY

LEADER

Donald Mager

PATRON

Melanie DeTone
 Julie Lenhard
 William Prescott

CLASS OF 2003

ADVOCATE

Melissa Stimson

PATRON

Kimberly Bennett
 Cindy Cheng
 Johnny Hung
 David Shubert

CLASS OF 2004

WILLIS G. GREGORY SOCIETY

LEADER

Scott Vanwart
 Audrey Winkowski

PATRON

Heather Bissell
 Nadine Francis
 Matthew Menz
 Erin Slazak

CLASS OF 2005

WILLIS G. GREGORY SOCIETY

LEADER

Yang Chen
 Seana Roza

PATRON

Katie Barbone
 Lynn Carlson
 SoSum Chack
 Sarah DeLuca
 Christie Fries
 Roseane Santos

CLASS OF 2006

ADVOCATE

TPATRON

Holly Coe
 Matthew Wojdyla

We have more than
5,000 active alumni who enrich
 the student experience
 through innovative
 precepting, mentorship
 and career guidance.

Donor Honor Roll *continued*

CLASS OF 2007

WILLIS G. GREGORY SOCIETY

LEADER

Richard Lin
Zhenling Yao

ADVOCATE

Tyler Smith-Strutz

PATRON

Lauren Dubs
Alison Huffman
Kaela Keluskar
Michael MacEvoy
Wendy MacEvoy
Navind Oodit
Kristin Spencer
Bonnie Yu

CLASS OF 2008

WILLIS G. GREGORY SOCIETY

LEADER

Rachel Peer

PATRON

Jordan Csati
Lindsey Csati
Kaela Keluskar
Tomasz Oszczykala
Pui Yi Tam

CLASS OF 2009

ADVOCATE

Shannon Rotolo

PATRON

James Ford
Lisa Nichols
Lisa Smith
Shweta Urva
Xinning Yang

CLASS OF 2010

WILLIS G. GREGORY SOCIETY

LEADER

Peggy Lee
Dong Liu

PATRON

Nicole Cieri-Hutcherson
Nicholas Falco
Nicholas Fusco
Gary Greco
Jesse Imes
Keith Rowe
Charles Venuto

CLASS OF 2011

PATRON

Amy Horey
Gauri Rao
Laura Sandler
Amy Zhou

CLASS OF 2012

WILLIS G. GREGORY SOCIETY

LEADER

Yang Chen
Xiaoyu Yan

PATRON

Christopher Daly
Christopher Diehl
Katherine Diehl
Maria Landicho
Wiesenberg
Christopher Martens

CLASS OF 2013

PATRON

Emily Chan
Scott Coon
Cierra Treu
Amy Zhou

CLASS OF 2014

WILLIS G. GREGORY SOCIETY

LEADER

Scott Vanwart

PATRON

Franklin Ilogho
Gregory Koopman
Julia Kuroski
Christina Matthews

CLASS OF 2015

PATRON

Leah Andress
Vincent Dellavalle
Patrick Galdun
Hengxin Lin
Kelley Nghiem
Gauri Rao
Betty Vu
Caitlin Willis
Li Zhang

CLASS OF 2016

PATRON

Traci Aladeen
Peter Fendt
Shelby Kelsh
Tyler Mullen
Kendra Nielsen
Xiaochen Zhao

CLASS OF 2017

WILLIS G. GREGORY SOCIETY

CHAMPION

Xu Zhu

PATRON

Collin Clark
Chan Li
Andrew Liang
Julie Obenauer

CLASS OF 2018

PATRON

Kaitlin Landolf
Lan-Hsi Lin
Haley Peer

CLASS OF 2019

PATRON

Chung Chen

FRIENDS, CORPORATIONS AND FOUNDATIONS

WILLIS G. GREGORY SOCIETY

GUARDIAN

American Association of
Colleges of Pharmacy
American College of
Clinical Pharmacy
Certara USA, Inc.
CPL Associates, LLC
Raymond Dannenhoffer
Catherine Dow
Enhanced
Pharmacodynamics,
LLC

K. Wing Fung
GBS/CIDP Foundation
International

Graduate Student
Association, UB
Independent Health
Association, Inc.
Gail Isaacs

Janssen Research and
Development, LLC

Johnson & Johnson
MAD-ID, Inc.

E. Kevin McGlynn
Sharon Miller
Barbara Moden

Rosanne Muto
National Multiple
Sclerosis Society

James and Kimberly
O'Donnell
David and Jan Panasci
Penny Pennington
Robert Pompei
Rochester Drug
Cooperative, Inc.

Donna Rocci
Stanley Brothers Biotech
Inc.

Terradiol Management
Company, LLC
Esther Trachtman
Maureen Vince
Walgreens
Wenzhou People's
Hopsital

CHAMPION

Amgen, Inc.
Cognigen Corporation
William Morris
Royal Society of
Chemistry
Frances Tan
Mary Taylor
Tops Markets, LLC

LEADER

Brigita Alks
Irma Amsel
Wayne and Lorraine
Anderson
A. Paul Aversano and
Paula Crone
Maria Bardos
Allen and Mary Lou
Barnett
Julie Bullock
CVS Caremark Charitable
Trust, Inc.

Tad D'Ambrosio
JoAnn Donn
Peter and Kathleen
Forgach

Leung and Sun Mi Fung
Christine Gabos
Carolyn Giroux
Sally Grout

Mary Hu
Raymond Johnson
Lina Kwok

Jennifer Lasezkay
Pamela Levitt
Ling Li
Libby Loucks

Sandra Madejski
Francis Marr
NACDS Foundation

Novartis
Barbara Oie
Anthony and Camille
Passarella
Brian Peer
Praxair Matching Gifts
Program

Mary Quinlan
Susan Rodgers
Linda Rosenfeld
Mark Schulz
A. Jere and Elma Solo
Patricia Stramaglia
Marilyn Sultz
Agnes Szekeres
Joyce Torre

David Triggler
Carolyn Voelkl
Anita Weintraub
Barbara Woodruff
Elizabeth Yamashita
Leigh Yates and William
Wallace

ADVOCATE

C. Teo and Jennifer
Balbach
Rebecca Brierley
John Carlo
Andrew and Andrea Esch
Coraline Esch
Richard Gosch
David Hart
Kathryn Lyons
Middleport Family Health
Center

Timothy Morris
Rozanne Myka
Thai Nguyen
Rutowski, J., & Sons, Inc.
Mark Shelton
David and Dorothy Soda
The Vertex Foundation
Woodmark Pharmacy of
New York
Yuanyuan Zhang

PATRON

Ekong Abasute
Glenda Adams
Gilbert Afful
Akron Pharmacy/Town
Country Gifts
Akzo Nobel Services, Inc.
Ahmed Amer
Jeanne Andolina
Thomas Andor
Suzanne Baldwin
Michael Bartone

Jane Bednarczyk
Edward and Jordan
Bernhardi
Robert Betzler
Robert Bies
Garrett Bissell
Beverly Block
Bristol-Myers Squibb
Foundation, Inc.
Pamela Buehler
Janeen Burruano
Janice Cerimeli
Teresa Coffey
Michael Cubera
Denise Czajkowski
Heidi Daly
Kevin and Laura
Dawidowicz
Malia DeAngelis
Joseph DeLuca
Kalpesh Desai
Danielle Dickson
Robin DiFrancesco
Pamela DiLuca
Jeannie Eng
Joan Erasing
Lee Fifield
Cory Fominaya
Cathleen and David
Fraass
Steven Gawronski
Elmer Gerbracht

Stephen Goeller
Sally Goliber
Michelle Grasso
Sarah Groff
John Hallenbeck
Lawrence Hargrave
Michelle Harkins
Kevin Hayes
Varsha Iyer
Daniel and Mary Lou
Jaszka
Ning Jiang
Gregory and Kris Jordan
Nora Kennon
Lawrence Kocher
Nancy Koester
Brenda Lee
Susan Liebowitz
Lilly
John Luzier
Jaime Maerten-Rivera
Mary Ellen Martin
Tracey Meek
Millenium
Pharmaceuticals, Inc.
Daniel Molino
Dominique Morin
Tabitha Moses
William Murphy
Sunil Murthy
Lily Ng
Cecilia Nwankwo

Sylvia Ou
Charles Peloquin
Deborah Piscitelli
Ann Posner
Gina Prescott
Judith Reuning
Barbara Rogler
Jennifer Rosenberg
Edward and Sherry
Russak
Margaret Schultz
Judith Schwartzmyer
Robert Seelig
Hongwu Shen
Mary Sherman
Merrette Sinnett
Kathryn Sirutis
Matthew Slazak
Mary Slimmer
Thomas Stengel
Vanessa Stevens
Nicolette Straley
Christine Strum
Richard Sudy
John and Karen Sweet
Andrew and Bonnie
Tangalos
Ira Targoff
Jennifer Thomas
Jason Thompson
M. Patte Train
Dana Trzewieczynski

Chengjian Tu
Theresa Tufuor
Necva Veysoglu
LeAnn Voyer
Sherry Wahler
Lance Wollenberg
Angela and James Yen
Teresa Young
Ming Zhang

UB LOYAL BLUES RECOGNITION LEVELS

WILLIS G. GREGORY SOCIETY

GUARDIAN
\$5,000+

CHAMPION
\$2,500 - \$4,999

LEADER
\$1,000-\$2,499

ADVOCATE
\$500 - \$999

PATRON
up to \$499

This report includes donors who have made gifts and planned gift commitments between July 1, 2018 and June 30, 2019. Every effort has been made to ensure the accuracy of the information. In the event of an error or omission, please contact the SPPS University Advancement Office at (716) 645-3432 so that we may update our records.



Endowed Scholarships and Fellowships

AVERSANO-STROZZI SCHOLARSHIP FUND

Melissa McGowan
Jenna Osetkowski

PROFESSOR EMERITUS THOMAS J. BARDOS SCHOLARSHIP FUND

Jin Niu

JEANNIE BAUDA DUMUTH SCHOLARSHIP FUND

Mary Hejna

JOSEPH BAUDA SCHOLARSHIP IN PHARMACY

Gabriel Fiorella

JUDITH CARDONI SCHOLARSHIP

Zakiya Rhodie

DAVID AND JANE CHU SCHOLARSHIP FUND

McKenna Butler
Laura Chen
Jennifer Han
Katherine Hong
Dian Lin
Alana Martin
Kaitlin McCadden
Anil Melathe
Nicole Petrella
Cody Racha

CLASS OF 1925 SCHOLARSHIP

Kwame Boakye-Yiadom
Victoria Getman
Neeraj John
Shawn Mayer
Joseph Meyer
Evan Michalski
Ogbonnaya Ogbonnaya
Charles Pang
James Puffaff
Zakiya Rhodie
Alexander Sherman
Colleen Shum
McQuaid Smyth
Joshua VanAmburg
Fiona Wu
Jinchan Yoo

ROBERT M. COOPER MEMORIAL AWARD

Brenna Gallivan
Kamrun Kanika
Joseph Ostroff
Zakiya Rhodie

CRIMALDI-MADEJSKI SCHOLARSHIP FUND

Lukas Brightman
Brittany Len

CVS SCHOLARSHIP

Peter Okoroza
Elaine Shao
Emmanuel Jean Simon t

X. DAVE AND LOIS D'AMBROSIO SCHOLARSHIP FUND

Richard Towne

PAMELA M. EMERSON SCHOLARSHIP FUND

Katelyn Abbott
McKenna Butler
Ashley Charles
Ilana Cypes
Melissa Dhanraj
Vivian Fung
Miranda Graham
Jennifer Han
Jessica Hillery
Katherine Hong
Rachel Klosko
Taylor Latvala
Brittany Len
Alana Martin
Kaitlin McCadden
Melissa McGowan
Jasmine Nurse
Megan O'Connor
Jenna Osetkowski
Nicole Petrella
Rachel Singer
Vicki Trieu
Fiona Wu
Eunice Yawson

LYLE GRAVES SCHOLARSHIP FUND

Amy Drzewiecki
Joshua Lennon
Karen Lin
Jessica Micceri
Dhiral Patel
Lea Perry
Edward Pudim
Habibur Rahman
Shenaz Shenaz
Clarissa Toner
Victoria Wong
Cui Ling Zhang

HOCK-ACKLEY SCHOLARSHIP FUND

Miranda Graham

GERALD AND KATHLEEN HOOLEY SCHOLARSHIP FUND

Ilana Cypes
Melissa Dhanraj
Eunice Yawson

INDEPENDENT HEALTH SCHOLARSHIP FUND

Katelyn Abbott
Jiawei Huang
Benjamin Lee
Baylie Slowik
Jingyian Tian
Kory Zelen

PAUL JONES SCHOLARSHIP FUND

Dennis Cai
Chi Wai Fan
Kaitlin Halligan

GILBERT J. KULICK SCHOLARSHIP FUND

Chung Hung Chen

LOREN LARWOOD SCHOLARSHIP FUND

Jared Gilbert
Neeraj John
Pauleen Pal
Justin Roulley
Chhime Sherpa
Alex Yu

FRANCIS AND EDWARD MAYER SCHOLARSHIP FUND

Tasha Dhawan
Shibei Li
Katy Wang
Alice Zheng

WILLIAM MCCOACH SCHOLARSHIP FUND

Nadia Mansouri

CECIL AND VIOLET NEWTON SCHOLARSHIP FUND

Lukas Brightman
Alice Chan
Chung Hung Chen
Lan Chen
Laura Chen
Zhilei Chen
Elissa Chu
Marc Coiro
Kristen D'Angelo
Michael Danilov
Renchen Dolma
Gabriel Fiorella
Farhad Foroutan
Brenna Gallivan

Kaitlin Halligan Mary Hejna

Jiawei Huang
Joke Itabiyi
Emmanuel Jean Simon
Kamrun Kanika
Christ Ange Katche
Yeri Kim
Jake Kinley
Lena Kuffuor-Afriyie
Benjamin Lee
Julia Lee
Lisa Li
Shibei Li
Dian Lin
Yushan Liu
Hui Hong Lu
Anna Mak
Nadia Mansouri
Anil Melathe
Sneha Monzy
Anessia Nagesar
Jennifer Ng
Eric Novak
Jasmine Nurse
Peter Okoroza
Joseph Ostroff
Neel Patel
Yonghua Qin
Cody Racha
Matia Senyonga
Elaine Shao
Christopher Singh
Baylie Slowik
Jakub Snopek
Briana Szpilka
Samuel Tan
Jerrica Tang
Jingyin Tian
Richard Towne
Andy Tse
Jonathan Wang
Boqiang Weng
Amy Wnuk
Emilee Yang
Alex Yu
Kory Zelen
Cui Ling Zhang
Xin Zheng

O'DONNELL FAMILY SCHOLARSHIP

McKenna Butler

HENRY A. PANASCI SCHOLARSHIP FUND

Ashley Charles
Farhad Foroutan
Jake Kinley
Neel Patel

HARRIET SHUMSKY SCHOLARSHIP

Myles Blas
Jake Kinley
Garrett Martin
Rifat Rahman
Jennifer Stanton
Briana Szpilka
Jerrica Tang

SALVATORE AND MARIA TORRE SCHOLARSHIP FUND

Lan Chen
Vicki Trieu

UB SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES GOLF SCHOLARSHIP FUND

Mary Hejna
Stephanie Lanza
Pauleena Pal
Laurie Plewinski
Zakiya Rhodie

UB SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES SCHOLARSHIP FUND

Katelyn Abbott
Jiawei Huang
Benjamin Lee
Anil Melathe
Jasmine Nurse
Laurie Plewinski
Zakiya Rhodie
Baylie Slowik
Jingyian Tian
Kory Zelen
Shu Zhong

UB SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES SCHOLARSHIP FUND FOR CENTRAL NY STUDENTS

Megan O'Connor

WALGREENS SCHOLARSHIP FUND

Sumaia Haque
Randolph Odamtten

WOMEN'S CLUB COLUMBIA UNIVERSITY SCHOLARSHIP

Marc Coiro
Kristen D'Angelo
Lena Kuffuor-Afriyie
Jerrica Tang

SCHOLARLY PURSUITS

Publications

JULY 1 2018 – JUNE 30 2019
INCLUDES EPUBS AHEAD OF PRINT*

PHARMACY PRACTICE

ALBANESE, NICOLE P

Ladziak N, Albanese NP. Effect of changing COPD triple-therapy inhaler combinations on COPD symptoms. *Am J Manag Care*. 2019 Apr;25(4):201-204.

Woodruff AE, Albanese NP, Prescott WA Jr. Comparing Pharmacotherapy Instruction to the 2009 and 2016 ACCP Toolkit Recommendations. *Am J Pharm Educ*. 2018 Dec;82(10):6771. doi: 10.5688/ajpe6771.

BEDNARCZYK, EDWARD

Russak EM, Bednarczyk EM. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216. doi: 10.1177/1060028018797110.

CHA, RAYMOND

Bergen PJ, Smith NM, Bedard TB, Bulman ZP, Cha R, Tsuji BT. Rational Combinations of Polymyxins with Other Antibiotics. *Adv Exp Med Biol*. 2019;1145:251-288. doi: 10.1007/978-3-030-16373-0_16.

Henig O, Pogue JM, Cha R, Kilgore PE, Hayat U, Ja'ara M, Ali RM, Mahboob S, Pansare R, Deeds K, Joarder B, Kandala H, Dhar S, Kaye KS. Epidemiology of Diabetic Foot Infection in the Metro-Detroit Area With a Focus on Independent Predictors for Pathogens Resistant to Recommended Empiric Antimicrobial Therapy. *Open Forum Infect Dis*. 2018 Sep 27;5(11):ofy245. doi: 10.1093/ofid/ofy245.

Hsaiky LM, Salinutri FD, Wong J, Jennings ST, Desai NH, Lobkovich AM, Cha R. Pharmacokinetics and investigation of optimal dose ertapenem in intermittent hemodialysis patients. *Nephrol Dial Transplant*. 2018 Jul 9. doi:10.1093/ndt/gfy166.

CIERI-HUTCHERSON, NICOLE E.

Griffin BL, Stone RH, El-Ibiary SY, Westberg S, Shealy K, Forinash A, Yancey A, Vest K, Karaoui LR, Rafie S, Horlen C, Lodise N, Cieri-Hutcherson N, McBane S, Simonyan A. Guide for Drug Selection During Pregnancy and Lactation: What Pharmacists Need to Know for Current Practice. *Ann Pharmacother*. 2018 Aug;52(8):810-818. doi: 10.1177/1060028018764447.

COOPER, LOUISE

Meaney CJ, Sudchada P, Consiglio JD, Wilding GE, Cooper LM, Venuto RC, Tornatore KM. Influence of Calcineurin Inhibitor and Sex on Mycophenolic Acid Pharmacokinetics and Adverse Effects Post-Renal Transplant. *J Clin Pharmacol*. 2019 Oct;59(10):1351-1365. doi: 10.1002/jcph.1428. Epub 2019 May 6.

DEMLER, TAMMIE LEE

Leppien EE, Demler TL, Trigoboff E. Exploring the Effectiveness of Team-based Enablement Interventions to Improve Antibiotic Prescribing within a Psychiatric Hospital. *Innov Clin Neurosci*. 2019 May 1;16(5-6):22-29.

Demler TL, Lysogorski MC, Trigoboff E. Exploring the Potential Psychiatric Implications of Astronomical Phenomena. *Innov Clin Neurosci*. 2019 Jan 1;16(1-2):27-30.

Victor K, Skelly M, Mulcahy K, Demler TL, Trigoboff E. A review and study of aspirin utilization for the primary prevention of cardiovascular events in a psychiatric population. *Int Clin Psychopharmacol*. 2018 Sep;33(5):274-281. doi:10.1097/YIC.0000000000000228.

Publications *continued*

DEMLER, TAMMIE LEE (cont.)

Leppien E, Demler TL. Examining prescriber perceptions of statin therapy and the potential implications these perceptions may have on guideline adherence. *Int Clin Psychopharmacol*. 2018 Sep;33(5):290–296. doi: 10.1097/YIC.0000000000000224.

DESAI, KALPESH J.

Hatton MN, Desai K, Le D, Vu A. Excessive postextraction bleeding associated with *Cordyceps sinensis*: a case report and review of select traditional medicines used by Vietnamese people living in the United States. *Oral Surg Oral Med Oral Pathol Oral Radiol*. 2018 Dec;126(6):494–500. doi: 10.1016/j.oooo.2018.07.005.

DIFRANCESCO, ROBIN

Makita-Chingombe F, Ocque AJ, DiFrancesco R, Maponga C, Muzambi F, Monera-Penduka TG, Mudzviti T, Mtisi TJ, Morse GD. Development and validation of a high performance liquid chromatography method to determine nevirapine in plasma in a resource-limited setting. *Afr J Lab Med*. 2019 May 16;8(1):880. doi:10.4102/ajlm.v8i1.880.

Ocque AJ, Hagler CE, DiFrancesco R, Lombardo J, Morse GD. Development and validation of an assay to measure cannabidiol and Δ^9 -tetrahydrocannabinol in human EDTA plasma by UHPLC-MS/MS. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2019 Apr 1;1112:56–60. doi: 10.1016/j.jchromb.2019.03.002.

DUNN, TERRY E.

Hart E, Dunn TE, Feuerstein S, Jacobs DM. Proton Pump Inhibitors and Risk of Acute and Chronic Kidney Disease: A Retrospective Cohort Study. *Pharmacotherapy*. 2019 Apr;39(4):443–453. doi: 10.1002/phar.2235.

FUSCO, NICHOLAS M.

Fusco NM, Foltz-Ramos K. Measuring changes in pharmacy and nursing students' perceptions following an interprofessional high-fidelity simulation experience. *J Interprof Care*. 2018 Sep;32(5):648–652. doi: 10.1080/13561820.2018.1496073.

Fusco NM, Prescott WA Jr, Meaney CJ. Pharmacokinetic Monitoring of Vancomycin in Cystic Fibrosis: Is It Time to Move Past Trough Concentrations? *Pediatr Infect Dis J*. 2019 Mar;38(3):258–262. doi: 10.1097/INF.0000000000002088.

JACOBS, DAVID M.

Hart E, Dunn TE, Feuerstein S, Jacobs DM. Proton Pump Inhibitors and Risk of Acute and Chronic Kidney Disease: A Retrospective Cohort Study. *Pharmacotherapy*. 2019 Apr;39(4):443–453. doi: 10.1002/phar.2235.

Jacobs DM, Pandit U, Sethi S. Acute exacerbations in chronic obstructive pulmonary disease: should we use antibiotics and if so, which ones? *Curr Opin Infect Dis*. 2019 Apr;32(2):143–151. doi: 10.1097/QCO.0000000000000533.

Dilworth TJ, Casapao AM, Ibrahim OM, Jacobs DM, Bowers DR, Beyda ND, Mercier RC. Adjuvant β -Lactam Therapy Combined with Vancomycin for Methicillin-Resistant *Staphylococcus aureus* Bacteremia: Does β -Lactam Class Matter? *Antimicrob Agents Chemother*. 2019 Feb 26;63(3). pii: e02211–18. doi: 10.1128/AAC.02211–18.

Hefti E, Jacobs DM, Rana K, Blanco JG. Analysis of outpatient HER2 testing in New York state using the statewide planning and research cooperative system. *Pharmacogenomics*. 2018 Dec;19(18):1395–1401. doi: 10.2217/pgs-2018-0120.

Jacobs DM, Sethi S. Reply: Looking for Predictors of Early Readmission in Chronic Obstructive Pulmonary Disease: Every Effort Is Required. *Ann Am Thorac Soc*. 2018 Nov;15(11):1367. doi: 10.1513/AnnalsATS.201808–526LE.

Jacobs DM, Ochs-Balcom HM, Zhao J, Murphy TF, Sethi S. Lower Airway Bacterial Colonization Patterns and Species-Specific Interactions in Chronic Obstructive Pulmonary Disease. *J Clin Microbiol*. 2018 Sep 25;56(10). pii: e00330–18. doi: 10.1128/JCM.00330–18.

Jacobs DM, Noyes K, Zhao J, Gibson W, Murphy TF, Sethi S, Ochs-Balcom HM. Early Hospital Readmissions after an Acute Exacerbation of Chronic Obstructive Pulmonary Disease in the Nationwide Readmissions Database. *Ann Am Thorac Soc*. 2018 Jul;15(7):837–845. doi: 10.1513/AnnalsATS.201712–913OC.

LOMBARDO, JEFFREY

Ocque AJ, Hagler CE, DiFrancesco R, Lombardo J, Morse GD. Development and validation of an assay to measure cannabidiol and Δ^9 -tetrahydrocannabinol in human EDTA plasma by UHPLC-MS/MS. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2019 Apr 1;1112:56–60. doi: 10.1016/j.jchromb.2019.03.002.

MA, QING

Ma Q, Ocque AJ, Morse GD, Sanders C, Burgi A, Little SJ, Letendre SL. Switching to Tenofovir Alafenamide in Elvitegravir-Based Regimens: Pharmacokinetics and Antiviral Activity in Cerebrospinal Fluid. *Clin Infect Dis*. 2019 Sep 27. pii: ciz926. doi: 10.1093/cid/ciz926. [Epub ahead of print]

Du X, Peng W, Fu Q, Ma Q, Zhu Z, Li T. A Review of Clinical Pharmacokinetic and Pharmacodynamic Profiles of Select Antiretrovirals: Focus on Differences among Chinese Patients. *Pharmacotherapy*. 2019 Sep 24. doi: 10.1002/phar.2333. [Epub ahead of print]

Ai M, Wang J, Chen J, Wang W, Xu X, Gan Y, Li X, Gou X, Cao J, Lv Z, Chen X, Wang H, Ma Q, Kuang L. Plasma brain-derived neurotrophic factor (BDNF) concentration and the BDNF Val66Met polymorphism in suicide: a prospective study in patients with depressive disorder. *Pharmacogenomics Pers Med*. 2019 Jul 2;12:97–106. doi: 10.2147/PGPM.S201187. eCollection 2019.

Livelli A, Vaida F, Ellis RJ, Ma Q, Ferrara M, Clifford DB, Collier AC, Gelman BB, Marra CM, McArthur JC, McCutchan JA, Morgello S, Sacktor N, Simpson DM, Grant I, Letendre SL; CHARTER Group. Correlates of HIV RNA concentrations in cerebrospinal fluid during antiretroviral therapy: a longitudinal cohort study. *Lancet HIV*. 2019 Jul;6(7):e456–e462. doi: 10.1016/S2352–3018(19)30143–2. 2. Epub 2019 Jun 14.

Lei S, Hong L, Yang C, Zhang S, Zhang Y, Huang S, Xie R, Li X, Ma Q, Li H. Effect of rilpivirine on the pharmacokinetics of methadone in HIV-Infected Chinese patients. *Expert Rev Clin Pharmacol*. 2019 Jun;12(6):565–571. doi: 10.1080/17512433.2019.1608523.

Bednasz CJ, Venuto CS, Ma Q, Daar ES, Sax PE, Fischl MA, Collier AC, Smith KY, Tierney C, Acosta EP, Mager DE, Morse GD; AIDS Clinical Trials Group Study A5202 Team. Race/Ethnicity and Protease Inhibitor Use Influence Plasma Tenofovir Exposure in Adults Living with HIV-1 in AIDS Clinical Trials Group Study A5202. *Antimicrob Agents Chemother*. 2019 Mar 27;63(4). pii: e01638–18. doi:10.1128/AAC.01638–18.

Ocque AJ, Hagler CE, Morse GD, Letendre SL, Ma Q. Development and validation of an LC-MS/MS assay for tenofovir and tenofovir alafenamide in human plasma and cerebrospinal fluid. *J Pharm Biomed Anal*. 2018 Jul 15;156:163–169. doi: 10.1016/j.jpba.2018.04.035.

MAPONGA, CHARLES

Makita-Chingombe F, Ocque AJ, DiFrancesco R, Maponga C, Muzambi F, Monera-Penduka TG, Mudzviti T, Mtisi TJ, Morse GD. Development and validation of a high performance liquid chromatography method to determine nevirapine in plasma in a resource-limited setting. *Afr J Lab Med*. 2019 May 16;8(1):880. doi: 10.4102/ajlm.v8i1.880.

Jilani MS, Tagwireyi D, Gadaga LL, Maponga CC, Mutsimhu C. Cognitive-Enhancing Effect of a Hydroethanolic Extract of *Crinum macowanii* against Memory Impairment Induced by Aluminum Chloride in BALB/c Mice. *Behav Neurol*. 2018 Oct 4;2018:2057219. doi: 10.1155/2018/2057219.

82

number of Department
of Pharmacy Practice
publications

Chagwena DT, Matanhire GT, Jombo TZ, Maponga CC, Protein quality of commonly consumed edible insects in zimbabwe *Afr. J. Food Agric. Nutr. Dev*. 2019; 19(3): 14674-14689 DOI: 10.18697/ajfand.85.17645

Mtisi TJ, Ndhlovu CE, Maponga CC, Morse GD. Tenofovir-associated kidney disease in Africans: a systematic review. *AIDS Res Ther*. 2019 Jun 6;16(1):12. doi: 10.1186/s12981-019-0227-1.

MEANEY, CALVIN J.

Meaney CJ, Sudchada P, Consiglio JD, Wilding GE, Cooper LM, Venuto RC, Tornatore KM. Influence of Calcineurin Inhibitor and Sex on Mycophenolic Acid Pharmacokinetics and Adverse Effects Post-Renal Transplant. *J Clin Pharmacol*. 2019 Oct;59(10):1351-1365. doi: 10.1002/jcph.1428. Epub 2019 May 6.

Meaney CJ, O'Connor M, McGowan M, Hamid M, Su W. Treatment of prolonged tacrolimus toxicity using phenytoin in a haemodialysis patient. *J Clin Pharm Ther*. 2019 Aug;44(4):640-643. doi: 10.1111/jcpt.12829. Epub 2019 Mar 4.

MEANEY, CALVIN J. (cont.)

Meaney CJ, Karas S, Robinson B, Gaesser J, Forrest A, Krzyzanski W, Panesar M, Rao GG. Definition and Validation of a Novel Metric of Erythropoiesis-Stimulating Agent Response in Hemodialysis Patients. *J Clin Pharmacol*. 2019 Mar;59(3):418-426. doi: 10.1002/jcph.1330.

Fusco NM, Prescott WA Jr, Meaney CJ. Pharmacokinetic Monitoring of Vancomycin in Cystic Fibrosis: Is It Time to Move Past Trough Concentrations? *Pediatr Infect Dis J*. 2019 Mar;38(3):258-262. doi: 10.1097/INF.0000000000002088.

MONTE, SCOTT V.

Monte SV, Russo KM, Mustafa E, Caruana JA. Impact of Sleeve Gastrectomy on Psychiatric Medication Use and Symptoms. *J Obes*. 2018 Oct 15;2018:8532602. doi: 10.1155/2018/8532602.

Ghanim H, Monte S, Caruana J, Green K, Abuaysheh S, Dandona P. Decreases in neprilysin and vasoconstrictors and increases in vasodilators following bariatric surgery. *Diabetes Obes Metab*. 2018 Aug;20(8):2029-2033. doi: 10.1111/dom.13320.

Wells C, Monte SV, Prescott WA Jr, Danek M, Gargala E, Woodruff AE. A Pharmacy Resident-Driven Pneumococcal Vaccination Protocol Increases Vaccination Rates in Hospitalized Patients over 65 Years. *J Am Coll Clin Pharm* 2019;2:488-493.

MORSE, GENE D.

Makita-Chingombe F, Ocque AJ, DiFrancesco R, Maponga C, Muzambi F, Monera-Penduka TG, Mudzviti T, Mtisi TJ, Morse GD. Development and validation of a high performance liquid chromatography method to determine nevirapine in plasma in a resource-limited setting. *Afr J Lab Med*. 2019 May 16;8(1):880. doi: 10.4102/ajlm.v8i1.880.

Mtisi TJ, Ndhlovu CE, Maponga CC, Morse GD. Tenofovir-associated kidney disease in Africans: a systematic review. *AIDS Res Ther*. 2019 Jun 6;16(1):12. doi: 10.1186/s12981-019-0227-1.

Ocque AJ, Hagler CE, DiFrancesco R, Lombardo J, Morse GD. Development and validation of an assay to measure cannabidiol and Δ^9 -tetrahydrocannabinol in human EDTA plasma by UHPLC-MS/MS. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2019 Apr 1;1112:56-60. doi: 10.1016/j.jchromb.2019.03.002.

Kutscher HL, Morse GD, Prasad PN, Reynolds JL. In vitro Pharmacokinetic Cell Culture System that Simulates Physiologic Drug and Nanoparticle Exposure to Macrophages. *Pharm Res*. 2019 Feb 1;36(3):44. doi: 10.1007/s11095-019-2576-9.

MORSE, GENE D (cont.)

Bednasz CJ, Venuto CS, Ma Q, Daar ES, Sax PE, Fischl MA, Collier AC, Smith KY, Tierney C, Acosta EP, Mager DE, Morse GD; AIDS Clinical Trials Group Study A5202 Team. Race/Ethnicity and Protease Inhibitor Use Influence Plasma Tenofovir Exposure in Adults Living with HIV-1 in AIDS Clinical Trials Group Study A5202. *Antimicrob Agents Chemother*. 2019 Mar 27;63(4). pii: e01638-18. doi: 10.1128/AAC.01638-18.

Bekale RB, Du Plessis SM, Hsu NJ, Sharma JR, Sampson SL, Jacobs M, Meyer M, Morse GD, Dube A. Mycobacterium Tuberculosis and Interactions with the Host Immune System: Opportunities for Nanoparticle Based Immunotherapeutics and Vaccines. *Pharm Res*. 2018 Nov 8;36(1):8. doi: 10.1007/s11095-018-2528-9.

Haas DW, Bradford Y, Verma A, Verma SS, Eron JJ, Gulick RM, Riddler SA, Sax PE, Daar ES, Morse GD, Acosta EP, Ritchie MD. Brain neurotransmitter transporter/receptor genomics and efavirenz central nervous system adverse events. *Pharmacogenet Genomics*. 2018 Jul;28(7):179-187. doi: 10.1097/FPC.0000000000000341.

Ocque AJ, Hagler CE, Morse GD, Letendre SL, Ma Q. Development and validation of an LC-MS/MS assay for tenofovir and tenofovir alafenamide in human plasma and cerebrospinal fluid. *J Pharm Biomed Anal*. 2018 Jul 15;156:163-169. doi: 10.1016/j.jpba.2018.04.035.

PRESCOTT, GINA M.

Prescott GM, Nobel A. A Multimodal Approach to Teaching Cultural Competency in the Doctor of Pharmacy Curriculum. *Am J Pharm Educ*. 2019 May;83(4):6651. doi: 10.5688/ajpe6651.

Prescott GM, Dascanio SA, Klosko R, Shogan M. Development of a medication health literacy program for refugees. *J Am Pharm Assoc* (2003). 2018 Nov - Dec;58(6):673-678. doi: 10.1016/j.japh.2018.08.009.

PRESCOTT, WILLIAM A.

Prescott WA Jr, Bernhardt C. Immunization Education in US Pharmacy Colleges and Schools. *Am J Pharm Educ*. 2019 Jun;83(5):6765. doi: 10.5688/ajpe6765.

Woodruff AE, Albanese NP, Prescott WA Jr. Comparing Pharmacotherapy Instruction to the 2009 and 2016 ACCP Toolkit Recommendations. *Am J Pharm Educ*. 2018 Dec;82(10):6771. doi: 10.5688/ajpe6771.

Publications *continued*

PRESCOTT, WILLIAM A. (cont.)

Fusco NM, Prescott WA Jr, Meaney CJ. Pharmacokinetic Monitoring of Vancomycin in Cystic Fibrosis: Is It Time to Move Past Trough Concentrations? *Pediatr Infect Dis J*. 2019 Mar;38(3):258–262. doi: 10.1097/INF.0000000000002088.

Wells C, Monte SV, Prescott WA Jr, Danek M, Gargala E, Woodruff AE. A Pharmacy Resident-Driven Pneumococcal Vaccination Protocol Increases Vaccination Rates in Hospitalized Patients over 65 Years. *J Am Coll Clin Pharm* 2019;2:488–493.

RUSSAK, EDWARD

Guttuso T Jr, Russak E, De Blanco MT, Ramanathan M. Could high lithium levels in tobacco contribute to reduced risk of Parkinson's disease in smokers? *J Neurol Sci*. 2019 Feb 15;397:179–180. doi: 10.1016/j.jns.2019.01.009.

Russak EM, Bednarczyk EM. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211–216. doi: 10.1177/1060028018797110.

SAWYER, JOSHUA

Przybyla SM, Parks K, Bleasdale J, Sawyer J, Morse D. Awareness, knowledge, and attitudes towards human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP) among pharmacy students. *Curr Pharm Teach Learn*. 2019 Apr;11(4):352–360. doi: 10.1016/j.cptl.2019.01.011.

SWIATEK, DENISE

Stewart SH, Walitzer KS, Blanco J, Swiatek D, Paine Hughes L, Quiñones-Lombraña A, Shyhalla K. Medication-enhanced behavior therapy for alcohol use disorder: Naltrexone, Alcoholics Anonymous Facilitation, and OPRM1 genetic variation. *J Subst Abuse Treat*. 2019 Sep;104:7–14. doi: 10.1016/j.jsat.2019.05.004. Epub 2019 May 4.

Swiatek D, Bosso NA, Hughes LP. Naltrexone for the Treatment of Alcohol Use Disorder in the Primary Care Setting. *US Pharmacist*. 2018; 43(8).

TORNATORE, KATHLEEN M.

Meaney CJ, Sudchada P, Consiglio JD, Wilding GE, Cooper LM, Venuto RC, Tornatore KM. Influence of Calcineurin Inhibitor and Sex on Mycophenolic Acid Pharmacokinetics and Adverse Effects Post-Renal Transplant. *J Clin Pharmacol*. 2019 Oct;59(10):1351–1365. doi: 10.1002/jcph.1428. Epub 2019 May 6.

TORNATORE, KATHLEEN M. (cont.)

Campagne O, Mager DE, Brazeau D, Venuto RC, Tornatore KM. The impact of tacrolimus exposure on extrarenal adverse effects in adult renal transplant recipients. *Br J Clin Pharmacol*. 2019 Mar;85(3):516–529. doi: 10.1111/bcp.13811.

Campagne O, Mager DE, Tornatore KM. Population Pharmacokinetics of Tacrolimus in Transplant Recipients: What Did We Learn About Sources of Interindividual Variabilities? *J Clin Pharmacol*. 2019 Mar;59(3):309–325. doi: 10.1002/jcph.1325.

Campagne O, Mager DE, Brazeau D, Venuto RC, Tornatore KM. Tacrolimus Population Pharmacokinetics and Multiple CYP3A5 Genotypes in Black and White Renal Transplant Recipients. *J Clin Pharmacol*. 2018 Sep;58(9):1184–1195. doi: 10.1002/jcph.1118.

TSUJI, BRIAN T.

Bergen PJ, Smith NM, Bedard TB, Bulman ZP, Cha R, Tsuji BT. Rational Combinations of Polymyxins with Other Antibiotics. *Adv Exp Med Biol*. 2019;1145:251–288. doi: 10.1007/978-3-030-16373-0_16.

Lenhard JR, Bulman ZP, Tsuji BT, Kaye KS. Shifting Gears: The Future of Polymyxin Antibiotics (Basel). 2019 Apr 12;8(2). pii: E42. doi: 10.3390/antibiotics8020042.

Jiao Y, Moya B, Chen MJ, Zavascki AP, Tsai H, Tao X, Sutaria DS, Louie A, Boyce JD, Deveson Lucas D, Kim TH, Tsuji BT, Bonomo RA, Drusano GL, Bulitta JB. Comparable Efficacy and Better Safety of Double β -Lactam Combination Therapy versus β Lactam plus Aminoglycoside in Gram-Negative Bacteria in Randomized, Controlled Trials. *Antimicrob Agents Chemother*. 2019 Jun 24;63(7). pii: e00425–19. doi: 10.1128/AAC.00425–19.

Sumon ZE, Berenson CS, Sellick JA, Bulman ZP, Tsuji BT, Mergenhagen KA. Successful cure of daptomycin-non-susceptible, vancomycin-intermediate *Staphylococcus aureus* prosthetic aortic valve endocarditis directed by synergistic in vitro time-kill study. *Infect Dis (Lond)*. 2019 Apr;51(4):287–292. doi: 10.1080/23744235.2018.1533646.

Tsuji BT, Pogue JM, Zavascki AP, Paul M, Daikos GL, Forrest A, Giacobbe DR, Viscoli C, Giamarellou H, Karaikos I, Kaye D, Mouton JW, Tam VH, Thamlikitkul V, Wunderink RG, Li J, Nation RL, Kaye KS. International Consensus Guidelines for the Optimal Use of the Polymyxins: Endorsed by the American College of Clinical Pharmacy (ACCP), European Society of Clinical Microbiology and Infectious Diseases (ESCMID), Infectious Diseases Society of America (IDSA), International Society for Anti-infective Pharmacology

TSUJI, BRIAN T. (cont.)

(ISAP), Society of Critical Care Medicine (SCCM), and Society of Infectious Diseases Pharmacists (SIDP). *Pharmacotherapy*. 2019 Jan;39(1):10–39. doi: 10.1002/phar.2209.

Nation RL, Theuretzbacher U, Tsuji BT; International Society of Anti-Infective Pharmacology (ISAP). Concentration-dependent plasma protein binding: Expect the unexpected. *Eur J Pharm Sci*. 2018 Sep 15;122:341–346. doi: 10.1016/j.ejps.2018.07.004.

Bulitta JB, Jiao Y, Drescher SK, Oliver A, Louie A, Moya B, Tao X, Wittau M, Tsuji BT, Zavascki AP, Shin BS, Drusano GL, Sörgel F, Landersdorfer CB. Four Decades of β -Lactam Antibiotic Pharmacokinetics in Cystic Fibrosis. *Clin Pharmacokinet*. 2019 Feb;58(2):143–156. doi: 10.1007/s40262-018-0678-x.

JOURNAL EDITORS:

7 faculty
9 journals

Bulman ZP, Zhao M, Satlin MJ, Chen L, Kreiswirth BN, Walsh TJ, Nation RL, Li J, Tsuji BT. Polymyxin B and fosfomycin thwart KPC-producing *Klebsiella pneumoniae* in the hollow-fibre infection model. *Int J Antimicrob Agents*. 2018 Jul;52(1):114–118. doi: 10.1016/j.ijantimicag.2018.02.010.

WAHLER, ROBERT G.

LaValley S, Wahler R, Singh R, Monte S, Brady L. Caregivers' Roles in Medication Management for Older Family Members. *Innovation in Aging*, 2018;2(suppl_1),290. doi:10.1093/geroni/igy023.1069

Brody P, Hejna MPS, Mason JPS, Graham MPS, Micceri JPS, Lypka RPS, Quinn BPS, Wilson HPS, Wahler RG. Utilization of a Peripheral Ultrasound Bone Density Scanner to Screen At-Risk Patients for Osteoporosis During Pharmacist-Led Wellness Clinics. *The Consultant Pharmacist*. 2018;33(10), 590.

Wahler RG, Piccione C, Maerten-Rivera J. Evaluation of Pharmacy Students' Ability to Identify Falls Risk Increasing Drugs Through In-Class Actual Patient-Based Utilization of a Medication Falls Risk Assessment Tool. *Am J Pharm Educ*. 2019 Apr 2. doi: 10.5688/ajpe7461. [Epub ahead of print]

WOODRUFF, ASHLEY E.

Wojakowski E, Kersten B, Woodruff AE. Challenging the convention of utilizing actual body weight dosing with intravenous immune globulin. *Clinical Research and Trials* 2018; doi: 10.15761/CRT.1000230

Woodruff AE, Albanese NP, Prescott WA Jr. Comparing Pharmacotherapy Instruction to the 2009 and 2016 ACCP Toolkit Recommendations. *Am J Pharm Educ.* 2018 Dec;82(10):6771. doi: 10.5688/ajpe6771.

Woodruff AE, Wovkulich MM, Mogle BT, Hassan AK. Association between prothrombin time and bleeding in hospitalized patients receiving rivaroxaban. *Am J Health Syst Pharm.* 2018 Nov 15;75(22):1783-1789. doi: 10.2146/ajhp180031.

Wells C, Monte SV, Prescott WA Jr, Danek M, Gargala E, Woodruff AE. A Pharmacy Resident-Driven Pneumococcal Vaccination Protocol Increases Vaccination Rates in Hospitalized Patients over 65 Years. *J Am Coll Clin Pharm* 2019;2:488-493.

PHARMACEUTICAL SCIENCES

BALTHASAR, JOSEPH P.

An B, Zhang M, Pu J, Shen S, Qu Y, Chen YJ, Huo S, Wang X, Polli JR, Balthasar JP, Herzog D, Ferrari L, Staack RF, Richter WF, Otteneder MB, Benincosa LJ, Zhou S, Vazvaei F, Qu J. High-Throughput, Sensitive LC-MS Quantification of Biotherapeutics and Biomarkers Using Antibody-Free, Peptide-Level, Multiple-Mechanism Enrichment via Strategic Regulation of pH and Ionic and Solvent Strengths. *Anal Chem.* 2019 Mar 5;91(5):3475-3483. doi: 10.1021/acs.analchem.8b05046.

Wang-Lin SX, Olson R, Beanan JM, MacDonald U, Russo TA, Balthasar JP. Antibody Dependent Enhancement of *Acinetobacter baumannii* Infection in a Mouse Pneumonia Model. *J Pharmacol Exp Ther.* 2019 Mar;368(3):475-489. doi: 10.1124/jpet.118.253617.

Glassman PM, Balthasar JP. Physiological-based modeling of monoclonal antibody pharmacokinetics in drug discovery and development. *Drug Metab Pharmacokin.* 2019 Feb;34(1):3-13. doi: 10.1016/j.dmpk.2018.11.002.

Li T, Balthasar JP. Development and Evaluation of a Physiologically Based Pharmacokinetic Model for Predicting the Effects of Anti-FcRn Therapy on the Disposition of Endogenous IgG in Humans. *J Pharm Sci.* 2019 Jan;108(1):714-724. doi: 10.1016/j.xphs.2018.10.067.

BALTHASAR, JOSEPH P. (cont.)

Li T, Balthasar JP. Application of Physiologically Based Pharmacokinetic Modeling to Predict the Effects of FcRn Inhibitors in Mice, Rats, and Monkeys. *J Pharm Sci.* 2019 Jan;108(1):701-713. doi: 10.1016/j.xphs.2018.10.065.

Amidon GE, Anderson BD, Balthasar JP, Bergstrom CAS, Huang SM, Kasting G, Kesisoglou F, Khinast JG, Mager DE, Roberts CJ, Yu L. Fifty-Eight Years and Counting: High-Impact Publishing in Computational Pharmaceutical Sciences and Mechanism-Based Modeling. *J Pharm Sci.* 2019 Jan;108(1):2-7. doi: 10.1016/j.xphs.2018.11.002.

Li T, Balthasar JP. FcRn Expression in Wildtype Mice, Transgenic Mice, and in Human Tissues. *Biomolecules.* 2018 Oct 15;8(4). pii: E115. doi: 10.3390/biom8040115.

Polli JR, Engler FA, Balthasar JP. Physiologically Based Modeling of the Pharmacokinetics of "Catch-and-Release" Anti-Carcinoembryonic Antigen Monoclonal Antibodies in Colorectal Cancer Xenograft Mouse Models. *J Pharm Sci.* 2019 Jan;108(1):674-691. doi: 10.1016/j.xphs.2018.09.037.

Engler FA, Polli JR, Li T, An B, Otteneder M, Qu J, Balthasar JP. "Catch-and-Release" Anti-Carcinoembryonic Antigen Monoclonal Antibody Leads to Greater Plasma and Tumor Exposure in a Mouse Model of Colorectal Cancer. *J Pharmacol Exp Ther.* 2018 Jul;366(1):205-219. doi: 10.1124/jpet.117.246900.

BALU-IYER, SATHY V.

Dingman R, Balu-Iyer SV. Immunogenicity of Protein Pharmaceuticals. *J Pharm Sci.* 2019 May;108(5):1637-1654. doi: 10.1016/j.xphs.2018.12.014.

Shenoy GN, Loyall J, Berenson CS, Kelleher RJ Jr, Iyer V, Balu-Iyer SV, Odunsi K, Bankert RB. Sialic Acid-Dependent Inhibition of T Cells by Exosomal Ganglioside GD3 in Ovarian Tumor Microenvironments. *J Immunol.* 2018 Dec 15;201(12):3750-3758. doi: 10.4049/jimmunol.1801041.

Glassman FY, Balu-Iyer SV. Subcutaneous administration of Lyso-phosphatidylserine nanoparticles induces immunological tolerance towards Factor VIII in a Hemophilia A mouse model. *Int J Pharm.* 2018 Sep 5;548(1):642-648. doi: 10.1016/j.ijpharm.2018.07.018.

Glassman FY, Schneider JL, Ramakrishnan R, Dingman RK, Ramanathan M, Bankert RB, Balu-Iyer SV. Phosphatidylserine Is Not Just a Cleanup Crew but Also a Well-Meaning Teacher. *J Pharm Sci.* 2018 Aug;107(8):2048-2054. doi: 10.1016/j.xphs.2018.03.027.

BIES, ROBERT R.

Koizumi T, Suzuki T, Pillai NS, Bies RR, Takeuchi H, Yoshimura K, Mimura M, Uchida H. Circadian patterns of hallucinatory experiences in patients with schizophrenia: Potentials for chrono-pharmacology. *J Psychiatr Res.* 2019 Oct;117:1-6. doi: 10.1016/j.jpsy-chires.2019.06.019. Epub 2019 Jun 24.

Rodriguez-Romero V, Bergstrom RF, Decker BS, Lahu G, Vakilynejad M, Bies RR. Prediction of Nephropathy in Type 2 Diabetes: An Analysis of the ACCORD Trial Applying Machine Learning Techniques. *Clin Transl Sci.* 2019 Sep;12(5):519-528. doi: 10.1111/cts.12647. Epub 2019 May 31.

Krause A, Kloft C, Huisinga W, Karlsson M, Pinheiro J, Bies R, Rogers J, Mentré F, Musser BJ; ASA Special Interest Group on Statistics and Pharmacometrics/ASA Special Interest Group on Statistics and Pharmacometrics (SIG SxP). Comment on Jaki et al., A proposal for a new PhD level curriculum on quantitative methods for drug development. *Pharmaceutical Statistics* 17 (5):593-606, Sep/Oct 2018, DOI: 10.1002/pst.1873. *Pharm Stat.* 2019 May;18(3):278-281. doi: 10.1002/pst.1940.

Pillai N, Schwartz SL, Ho T, Dokoumetzidis A, Bies R, Freedman I. Estimating parameters of nonlinear dynamic systems in pharmacology using chaos synchronization and grid search. *J Pharmacokinetic Pharmacodyn.* 2019 Apr;46(2):193-210. doi: 10.1007/s10928-019-09629-4.

Bies RR. Preface to Special Issue for Panos Macheras. *J Pharmacokinetic Pharmacodyn.* 2019 Apr;46(2):103. doi: 10.1007/s10928-019-09631-w.

Endrenyi L, Bies RR. Panos Macheras: a pioneering scientist in pharmaceutical science. *J Pharmacokinetic Pharmacodyn.* 2019 Apr;46(2):105-109. doi: 10.1007/s10928-019-09628-5.

Kay K, Dolcy K, Bies R, Shah DK. Estimation of Solid Tumor Doubling Times from Progression-Free Survival Plots Using a Novel Statistical Approach. *AAPS J.* 2019 Feb 8;21(2):27. doi: 10.1208/s12248-019-0302-5.

Liu S, Hu C, Peters J, Tsang A, Cremers S, Bies R, Page-Wilson G. Pharmacokinetics and pharmacodynamics of ropinirole in patients with prolactinomas. *Br J Clin Pharmacol.* 2019 Feb;85(2):366-376. doi: 10.1111/bcp.13802.

Pillai N, Craig M, Dokoumetzidis A, Schwartz SL, Bies R, Freedman I. Chaos synchronization and Nelder-Mead search for parameter estimation in nonlinear pharmacological systems: Estimating tumor antigenicity in a model of immunotherapy. *Prog Biophys Mol Biol.* 2018 Nov;139:23-30. doi: 10.1016/j.pbiomolbio.2018.06.006.

Publications *continued*

BIES, ROBERT R. (cont.)

Kay K, Shah DK, Rohan L, Bies R. Physiologically-based pharmacokinetic model of vaginally administered dapivirine ring and film formulations. *Br J Clin Pharmacol*. 2018 Sep;84(9):1950–1969. doi: 10.1111/bcp.13625.

Kumar SS, Biltaji E, Bies R, Sherwin CM. The clinical utility of pharmacometric models. *Br J Clin Pharmacol*. 2018 Jul;84(7):1413–1414. doi: 10.1111/bcp.13603.

BLANCO, JAVIER G.

Stewart SH, Walitzer KS, Blanco J, Swiatek D, Paine Hughes L, Quiñones-Lombrana A, Shyhalla K. Medication-enhanced behavior therapy for alcohol use disorder: Naltrexone, Alcoholics Anonymous Facilitation, and OPRM1 genetic variation. *J Subst Abuse Treat*. 2019 Sep;104:7–14. doi: 10.1016/j.jsat.2019.05.004. Epub 2019 May 4.

Quiñones-Lombrana A, Blanco JG. Comparative analysis of the DYRK1A–SRSF6–TNNT2 pathway in myocardial tissue from individuals with and without Down syndrome. *Exp Mol Pathol*. 2019 Oct;110:104268. doi: 10.1016/j.yemp.2019.104268. Epub 2019 Jun 12.

Quiñones-Lombrana A, Intini A, Blanco JG. Insights into the transcriptional regulation of the anthracycline reductase AKR7A2 in human cardiomyocytes. *Toxicol Lett*. 2019 Jun 1;307:11–16. doi: 10.1016/j.toxlet.2019.02.015.

Cejas RB, Ferguson DC, Quiñones-Lombrana A, Bard JE, Blanco JG. Contribution of DNA methylation to the expression of FCGRT in human liver and myocardium. *Sci Rep*. 2019 Jun 17;9(1):8674. doi: 10.1038/s41598-019-45203-1.

Hefti E, Jacobs DM, Rana K, Blanco JG. Analysis of outpatient HER2 testing in New York state using the statewide planning and research cooperative system. *Pharmacogenomics*. 2018 Dec;19(18):1395–1401. doi: 10.2217/pgs-2018-0120.

GALLO, JAMES M.

Hansen J, Galatioti J, Caescu CI, Arnaud P, Calizo RC, Spronck B, Murtada SI, Borkar R, Weinberg A, Azeloglu EU, Bintanel-Morcillo M, Gallo JM, Humphrey JD, Jondeau G, Boileau C, Ramirez F, Iyengar R. Systems pharmacology-based integration of human and mouse data for drug repurposing to treat thoracic aneurysms. *JCI Insight*. 2019 Jun 6;4(11). pii: 127652. doi: 10.1172/jci.insight.127652.

Gallo JM. Modulation of Cell State to Improve Drug Therapy. *CPT Pharmacometrics Syst Pharmacol*. 2018 Sep;7(9):539–542. doi: 10.1002/psp4.12317.

JUSKO, WILLIAM J.

Ayyar VS, Song D, DuBois DC, Almon RR, Jusko WJ. Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part I: Determination and Prediction of Dexamethasone and Methylprednisolone Tissue Binding in the Rat. *J Pharmacol Exp Ther*. 2019 Aug;370(2):318–326. doi: 10.1124/jpet.119.257519. Epub 2019 Jun 13.

Ayyar VS, DuBois DC, Nakamura T, Almon RR, Jusko WJ. Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part II: Sex Differences in Methylprednisolone Pharmacokinetics and Corticosterone Suppression. *J Pharmacol Exp Ther*. 2019 Aug;370(2):327–336. doi: 10.1124/jpet.119.257527. Epub 2019 Jun 13.

Ayyar VS, DuBois DC, Almon RR, Jusko WJ. Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part III: Estrous Cycle and Estrogen Receptor-Dependent Antagonism of Glucocorticoid-Induced Leucine Zipper (GLZ) Enhancement by Corticosteroids. *J Pharmacol Exp Ther*. 2019 Aug;370(2):337–349. doi: 10.1124/jpet.119.257543. Epub 2019 Jun 13.

160
number of Department
of Pharmaceutical
Sciences publications

Barcellos T, Natavio M, Stanczyk FZ, Luo D, Jusko WJ, Bender NM. Effects of ritonavir-boosted protease inhibitors on combined oral contraceptive pharmacokinetics and pharmacodynamics in HIV-positive women. *Contraception*. 2019 Jun 10. pii: S0010-7824(19)30201-X. doi: 10.1016/j.contraception.2019.06.002.

Mavroudis PD, Ayyar VS, Jusko WJ. ATLAS mPBPK: a MATLAB-based tool for modeling and Simulation of minimal Physiologically Based Pharmacokinetic models. *CPT Pharmacometrics Syst Pharmacol*. 2019 Jun 2. doi: 10.1002/psp4.12441.

Acevedo A, Berthel A, DuBois D, Almon RR, Jusko WJ, Androulakis IP. Pathway-Based Analysis of the Liver Response to Intravenous Methylprednisolone Administration in Rats: Acute Versus Chronic Dosing. *Gene Regul Syst Bio*. 2019 Apr 15;13:1177625019840282. doi: 10.1177/1177625019840282.

JUSKO, WILLIAM J. (cont.)

Mavroudis PD, van den Anker J, Conklin LS, Damsker JM, Hoffman EP, Nagaraju K, Clemens PR, Jusko WJ. Population Pharmacokinetics of Vamorolone (VBP15) in Healthy Men and Boys With Duchenne Muscular Dystrophy. *J Clin Pharmacol*. 2019 Jul;59(7):979–988. doi: 10.1002/jcph.1388. Epub 2019 Feb 11.

Natavio M, Stanczyk FZ, Molins EAG, Nelson A, Jusko WJ. Pharmacokinetics of the 1.5 mg levonorgestrel emergency contraceptive in women with normal, obese and extremely obese body mass index. *Contraception*. 2019 May;99(5):306–311. doi: 10.1016/j.contraception.2019.01.003.

Ayyar VS, Krzyzanski W, Jusko WJ. Indirect pharmacodynamic models for responses with circadian removal. *J Pharmacokinetic Pharmacodyn*. 2019 Feb;46(1):89–101. doi: 10.1007/s10928-019-09620-z.

Luo D, Carter KA, Molins EAG, Straubinger NL, Geng J, Shao S, Jusko WJ, Straubinger RM, Lovell JF. Pharmacokinetics and pharmacodynamics of liposomal chemophototherapy with short drug-light intervals. *J Control Release*. 2019 Mar 10;297:39–47. doi: 10.1016/j.jconrel.2019.01.030.

Luo D, Westhoff CL, Edelman AB, Natavio M, Stanczyk FZ, Jusko WJ. Altered pharmacokinetics of combined oral contraceptives in obesity – multistudy assessment. *Contraception*. 2019 Apr;99(4):256–263. doi: 10.1016/j.contraception.2018.12.009.

Conklin LS, Damsker JM, Hoffman EP, Jusko WJ, Mavroudis PD, Schwartz BD, Mengle-Gaw LJ, Smith EC, Mah JK, Guglieri M, Nevo Y, Kuntz N, McDonald CM, Tulinius M, Ryan MM, Webster R, Castro D, Finkel RS, Smith AL, Morgenroth LP, Arrieta A, Shimony M, Jaros M, Shale P, McCall JM, Hathout Y, Nagaraju K, van den Anker J, Ward LM, Ahmet A, Cornish MR, Clemens PR. Phase IIa trial in Duchenne muscular dystrophy shows vamorolone is a first-in-class dissociative steroidal anti-inflammatory drug. *Pharmacol Res*. 2018 Oct;136:140–150. doi: 10.1016/j.phrs.2018.09.007.

Song D, DuBois DC, Almon RR, Jusko WJ. Modeling Sex Differences in Anti-inflammatory Effects of Dexamethasone in Arthritic Rats. *Pharm Res*. 2018 Sep 6;35(11):203. doi: 10.1007/s11095-018-2483-5.

Ayyar VS, Sukumaran S, DuBois DC, Almon RR, Jusko WJ. Modeling Corticosteroid Pharmacogenomics and Proteomics in Rat Liver. *J Pharmacol Exp Ther*. 2018 Oct;367(1):168–183. doi: 10.1124/jpet.118.251959.

JUSKO, WILLIAM J. (cont.)

Zhu X, Shen X, Qu J, Straubinger RM, Jusko WJ. Multi-Scale Network Model Supported by Proteomics for Analysis of Combined Gemcitabine and Birinapant Effects in Pancreatic Cancer Cells. *CPT Pharmacometrics Syst Pharmacol*. 2018 Sep;7(9):549-561. doi: 10.1002/psp4.12320.

Zhu X, Trueman S, Straubinger RM, Jusko WJ. Physiologically-based pharmacokinetic and pharmacodynamic models for gemcitabine and birinapant in pancreatic cancer xenografts. *J Pharmacokinet Pharmacodyn*. 2018 Oct;45(5):733-746. doi: 10.1007/s10928-018-9603-z.

Li X, Jusko WJ, Cao Y. Role of Interstitial Fluid Turnover on Target Suppression by Therapeutic Biologics Using a Minimal Physiologically Based Pharmacokinetic Model. *J Pharmacol Exp Ther*. 2018 Oct;367(1):1-8. doi: 10.1124/jpet.118.250134.

Ayyar VS, Sukumaran S, DuBois DC, Almon RR, Qu J, Jusko WJ. Receptor/gene/protein-mediated signaling connects methylprednisolone exposure to metabolic and immune-related pharmacodynamic actions in liver. *J Pharmacokinet Pharmacodyn*. 2018 Aug;45(4):557-575. doi: 10.1007/s10928-018-9585-x.

KRZYZANSKI, WOJCIECH

Krzyzanski W, Cook SF, Wilbax M, Sherwin CMT, Allegaert K, Vermeulen A, van den Anker JN. Population Pharmacokinetic Modeling in the Presence of Missing Time-Dependent Covariates: Impact of Body Weight on Pharmacokinetics of Paracetamol in Neonates. *AAPS J*. 2019 May 28;21(4):68. doi: 10.1208/s12248-019-0331-0.

Ayyar VS, Krzyzanski W, Jusko WJ. Indirect pharmacodynamic models for responses with circadian removal. *J Pharmacokinet Pharmacodyn*. 2019 Feb;46(1):89-101. doi: 10.1007/s10928-019-09620-z.

Krzyzanski W. Ordinary differential equation approximation of gamma distributed delay model. *J Pharmacokinet Pharmacodyn*. 2019 Feb;46(1):53-63. doi: 10.1007/s10928-018-09618-z.

Meaney CJ, Karas S, Robinson B, Gaesser J, Forrest A, Krzyzanski W, Panesar M, Rao GG. Definition and Validation of a Novel Metric of Erythropoiesis-Stimulating Agent Response in Hemodialysis Patients. *J Clin Pharmacol*. 2019 Mar;59(3):418-426. doi: 10.1002/jcph.1330.

MAGER, DONALD E.

Niu J, Straubinger RM, Mager DE. Pharmacodynamic Drug-Drug Interactions. *Clin Pharmacol Ther*. 2019 Jun;105(6):1395-1406. doi: 10.1002/cpt.1434.

Morcos PN, Boehnke A, Valente N, Mager DE. Rituximab dosing in hematological malignancies: an old question, revisited. *Cancer Chemother Pharmacol*. 2019 Sep;84(3):661-666. doi: 10.1007/s00280-019-03818-1. Epub 2019 Mar 21.

Bednasz CJ, Venuto CS, Ma Q, Daar ES, Sax PE, Fischl MA, Collier AC, Smith KY, Tierney C, Acosta EP, Mager DE, Morse GD; AIDS Clinical Trials Group Study A5202 Team. Race/Ethnicity and Protease Inhibitor Use Influence Plasma Tenofovir Exposure in Adults Living with HIV-1 in AIDS Clinical Trials Group Study A5202. *Antimicrob Agents Chemother*. 2019 Mar 27;63(4). pii: e01638-18. doi: 10.1128/AAC.01638-18.

Bloomingtondale P, Mager DE. Machine Learning Models for the Prediction of Chemotherapy-Induced Peripheral Neuropathy. *Pharm Res*. 2019 Jan 7;36(2):35. doi: 10.1007/s11095-018-2562-7.

Ramakrishnan V, Mager DE. Pharmacodynamic Models of Differential Bortezomib Signaling Across Several Cell Lines of Multiple Myeloma. *CPT Pharmacometrics Syst Pharmacol*. 2019 Mar;8(3):146-157. doi: 10.1002/psp4.12358.

Zhang L, Mager DE. Systems Modeling of Bortezomib and Dexamethasone Combinatorial Effects on Bone Homeostasis in Multiple Myeloma Patients. *J Pharm Sci*. 2019 Jan;108(1):732-740. doi: 10.1016/j.xphs.2018.11.024.

Amidon GE, Anderson BD, Balthasar JP, Bergstrom CAS, Huang SM, Kasting G, Kesiosoglou F, Khinast JG, Mager DE, Roberts CJ, Yu L. Fifty-Eight Years and Counting: High-Impact Publishing in Computational Pharmaceutical Sciences and Mechanism-Based Modeling. *J Pharm Sci*. 2019 Jan;108(1):2-7. doi: 10.1016/j.xphs.2018.11.002.

Campagne O, Mager DE, Brazeau D, Venuto RC, Tornatore KM. The impact of tacrolimus exposure on extrarenal adverse effects in adult renal transplant recipients. *Br J Clin Pharmacol*. 2019 Mar;85(3):516-529. doi: 10.1111/bcp.13811.

Campagne O, Mager DE, Tornatore KM. Population Pharmacokinetics of Tacrolimus in Transplant Recipients: What Did We Learn About Sources of Interindividual Variabilities? *J Clin Pharmacol*. 2019 Mar;59(3):309-325. doi: 10.1002/jcph.1325.

MAGER, DONALD E. (cont.)

Campagne O, Mager DE, Brazeau D, Venuto RC, Tornatore KM. Tacrolimus Population Pharmacokinetics and Multiple CYP3A5 Genotypes in Black and White Renal Transplant Recipients. *J Clin Pharmacol*. 2018 Sep;58(9):1184-1195. doi: 10.1002/jcph.1118.

MORRIS, MARILYN E.

Follman KE, Morris ME. Treatment of γ -Hydroxybutyric Acid and γ -Butyrolactone Overdose with Two Potent Monocarboxylate Transporter 1 Inhibitors, AZD3965 and AR-C155858. *J Pharmacol Exp Ther*. 2019 Jul;370(1):84-91. doi: 10.1124/jpet.119.256503. Epub 2019 Apr 22.

Follman KE, Morris ME. Simulation-Based Analysis of the Impact of Renal Impairment on the Pharmacokinetics of Highly Metabolized Compounds. *Pharmaceutics*. 2019 Mar 2;11(3). pii: E105. doi: 10.3390/pharmaceutics11030105. Guan X, Rodriguez-Cruz V, Morris ME. Cellular Uptake of MCT1 Inhibitors AR-C155858 and AZD3965 and Their Effects on MCT-Mediated Transport of L-Lactate in Murine 4T1 Breast Tumor Cancer Cells. *AAPS J*. 2019 Jan 7;21(2):13. doi: 10.1208/s12248-018-0279-5.

Guan X, Rodriguez-Cruz V, Morris ME. Cellular Uptake of MCT1 Inhibitors AR-C155858 and AZD3965 and Their Effects on MCT-Mediated Transport of L-Lactate in Murine 4T1 Breast Tumor Cancer Cells. *AAPS J*. 2019 Jan 7;21(2):13. doi:10.1208/s12248-018-0279-5.

Guan X, Bryniarski MA, Morris ME. In Vitro and In Vivo Efficacy of the Monocarboxylate Transporter 1 Inhibitor AR-C155858 in the Murine 4T1 Breast Cancer Tumor Model. *AAPS J*. 2018 Nov 5;21(1):3. doi: 10.1208/s12248-018-0261-2.

Bryniarski MA, Yee BM, Jaffri I, Chaves LD, Yu JA, Guan X, Ghavam N, Yacoub R, Morris ME. Increased megalin expression in early type 2 diabetes: role of insulin-signaling pathways. *Am J Physiol Renal Physiol*. 2018 Nov 1;315(5):F1191-F1207. doi: 10.1152/ajprenal.00210.2018.

NGUYEN, JULIANE

Bonacquisti EE, Nguyen J. Connexin 43 (Cx43) in cancer: Implications for therapeutic approaches via gap junctions. *Cancer Lett*. 2019 Feb 1;442:439-444. doi: 10.1016/j.canlet.2018.10.043.

Publications *continued*

NGUYEN, JULIANE (cont.)

Wang J, Seo MJ, Deci MB, Weil BR, Canty JM, Nguyen J. Effect of CCR2 inhibitor-loaded lipid micelles on inflammatory cell migration and cardiac function after myocardial infarction. *Int J Nanomedicine*. 2018 Oct 15;13:6441-6451. eCollection 2018.

Sharma UC, Sonkawade SD, Sperryak JA, Sexton S, Nguyen J, Dahal S, Attwood KM, Singh AK, van Berlo JH, Pokharel S. A Small Peptide Ac-SDKP Inhibits Radiation-Induced Cardiomyopathy. *Circ Heart Fail*. 2018 Aug;11(8):e004867. doi:10.1161/CIRCHEARTFAILURE.117.004867.

Deci MB, Ferguson SW, Scatigno SL, Nguyen J. Modulating Macrophage Polarization through CCR2 Inhibition and Multivalent Engagement. *Mol Pharm*. 2018 Jul 2;15(7):2721-2731. doi: 10.1021/acs.molpharmaceut.8b00237.

O'DONNELL, JAMES M.

Zhu X, Li W, Li Y, Xu W, Yuan Y, Zheng V, Zhang H, O'Donnell JM, Xu Y, Yin X. The antidepressant- and anxiolytic-like effects of resveratrol: Involvement of phosphodiesterase-4D inhibition. *Neuropharmacology*. 2019 Jul 15;153:20-31. doi: 10.1016/j.neuropharm.2019.04.022. Epub 2019 Apr 24.

Gurney ME, Nugent RA, Mo X, Sindac JA, Hagen TJ, Fox D 3rd, O'Donnell JM, Zhang C, Xu Y, Zhang HT, Groppi VE, Bailie M, White RE, Romero DL, Vellekoop AS, Walker JR, Surman MD, Zhu L, Campbell RF. Design and Synthesis of Selective Phosphodiesterase 4D (PDE4D) Allosteric Inhibitors for the Treatment of Fragile X Syndrome and Other Brain Disorders. *J Med Chem*. 2019 May 23;62(10):4884-4901. doi: 10.1021/acs.jmedchem.9b00193.

Chen L, Cui S, Yu H, Li G, Liu N, Wu Q, Zhang HT, O'Donnell JM, Wang G, Xu Y. Reduced phosphodiesterase-2 activity in the amygdala results in anxiolytic-like effects on behavior in mice. *J Psychopharmacol*. 2019 May;33(5):568-576. doi: 10.1177/0269881119832753.

Xu Y, Zhu N, Xu W, Ye H, Liu K, Wu F, Zhang M, Ding Y, Zhang C, Zhang H, O'Donnell J, Pan J. Inhibition of Phosphodiesterase-4 Reverses $\beta\beta$ -Induced Memory Impairment by Regulation of HPA Axis Related cAMP Signaling. *Front Aging Neurosci*. 2018 Jul 24;10:204. doi: 10.3389/fnagi.2018.00204.

Poloyac SM, Cavanaugh JE, Hagemeyer NE, Kumar K, Melchert RB, O'Donnell JM, Priefer R, Touchette DR, Farrell DF, Block KF. Breaking Down Barriers to Pharmacy Graduate Education: The Report of the 2017-2018 Research and Graduate Affairs Committee. *Am J Pharm Educ*. 2018 Sep;82(7):7147. doi: 10.5688/ajpe7147.

O'DONNELL, JAMES M. (cont.)

Huang X, Xiaokaiti Y, Yang J, Pan J, Li Z, Luria V, Li Y, Song G, Zhu X, Zhang HT, O'Donnell JM, Xu Y. Inhibition of phosphodiesterase 2 reverses gp91phox oxidase-mediated depression- and anxiety-like behavior. *Neuropharmacology*. 2018 Dec;143:176-185. doi: 10.1016/j.neuropharm.2018.09.039.

Zhang C, Xu Y, Chowdhary A, Fox D 3rd, Gurney ME, Zhang HT, Auerbach BD, Salvi RJ, Yang M, Li G, O'Donnell JM. Memory enhancing effects of BPN14770, an allosteric inhibitor of phosphodiesterase-4D, in wild-type and humanized mice. *Neuropsychopharmacology*. 2018 Oct;43(11):2299-2309. doi: 10.1038/s41386-018-0178-6.

Shi J, Liu H, Pan J, Chen J, Zhang N, Liu K, Fei N, O'Donnell JM, Zhang HT, Xu Y. Inhibition of phosphodiesterase 2 by Bay 60-7550 decreases ethanol intake and preference in mice. *Psychopharmacology (Berl)*. 2018 Aug;235(8):2377-2385. doi: 10.1007/s00213-018-4934-4.

Huang XF, Jiang WT, Liu L, Song FC, Zhu X, Shi GL, Ding SM, Ke HM, Wang W, O'Donnell JM, Zhang HT, Luo HB, Wan YQ, Song GQ, Xu Y. A novel PDE9 inhibitor WYQ-C36D ameliorates corticosterone-induced neurotoxicity and depression-like behaviors by cGMP-CREB-related signaling. *CNS Neurosci Ther*. 2018 Oct;24(10):889-896. doi: 10.1111/cns.12864.

Liu L, Zheng J, Huang XF, Zhu X, Ding SM, Ke HM, O'Donnell JM, Zhang HT, Song GQ, Xu Y. The neuroprotective and antidepressant-like effects of Hcyb1, a novel selective PDE2 inhibitor. *CNS Neurosci Ther*. 2018 Jul;24(7):652-660. doi: 10.1111/cns.12863.

QU, JUN

Ng AYH, Li Z, Jones MM, Yang S, Li C, Fu C, Tu C, Oursler MJ, Qu J, Yang S. Regulator of G protein signaling 12 enhances osteoclastogenesis by suppressing Nrf2-dependent antioxidant proteins to promote the generation of reactive oxygen species. *Elife*. 2019 Sep 6;8. pii: e42951. doi: 10.7554/eLife.42951. [Epub ahead of print]

Rapanelli M, Tan T, Wang W, Wang X, Wang ZJ, Zhong P, Frick L, Qin L, Ma K, Qu J, Yan Z. Behavioral, circuitry, and molecular aberrations by region-specific deficiency of the high-risk autism gene Cul3. *Mol Psychiatry*. 2019 Aug 27. doi: 10.1038/s41380-019-0498-x. [Epub ahead of print]

Jones RS, Tu C, Zhang M, Qu J, Morris ME. Characterization and Proteomic-Transcriptomic Investigation of Monocarboxylate Transporter 6 Knockout Mice: Evidence of a Potential Role in Glucose and Lipid Metabolism. *Mol Pharmacol*. 2019 Sep;96(3):364-376. doi: 10.1124/mol.119.116731. Epub 2019 Jul 10.

QU, JUN (cont.)

Aranda JV, Qu J, Valencia GB, Beharry KD. Pharmacologic interventions for the prevention and treatment of retinopathy of prematurity. *Semin Perinatol*. 2019 Oct;43(6):360-366. doi: 10.1053/j.semperi.2019.05.009. Epub 2019 May 11.

Wang X, Shen S, Rasam SS, Qu J. MS1 ion current-based quantitative proteomics: A promising solution for reliable analysis of large biological cohorts. *Mass Spectrom Rev*. 2019 Mar 28. doi: 10.1002/mas.21595.

ASSOCIATE EDITORS:

5 faculty
7 journals

Shu S, Yang Y, Allen CL, Maguire O, Minderman H, Sen A, Ciesielski MJ, Collins KA, Bush PJ, Singh P, Wang X, Morgan M, Qu J, Bankert RB, Whiteside TL, Wu Y, Ernstoff MS. Publisher Correction: Metabolic reprogramming of stromal fibroblasts by melanoma exosome microRNA favours a pre-metastatic microenvironment. *Sci Rep*. 2019 Mar 15;9(1):4959. doi: 10.1038/s41598-018-37179-1.

Zhang J, Gelman IH, Katsuta E, Liang Y, Wang X, Li J, Qu J, Yan L, Takabe K, Hochwald SN. Glucose Drives Growth Factor-Independent Esophageal Cancer Proliferation via Phosphohistidine-Focal Adhesion Kinase Signaling. *Cell Mol Gastroenterol Hepatol*. 2019;8(1):37-60. doi: 10.1016/j.jcmgh.2019.02.009.

Singel KL, Emmons TR, Khan ANH, Mayor PC, Shen S, Wong JT, Morrell K, Eng KH, Mark J, Bankert RB, Matsuzaki J, Koya RC, Blom AM, McLeish KR, Qu J, Ram S, Moysich KB, Abrams SI, Odunsi K, Zsiros E, Segal BH. Mature neutrophils suppress T cell immunity in ovarian cancer microenvironment. *JCI Insight*. 2019 Mar 7;4(5). pii: 122311. doi: 10.1172/jci.insight.122311.

An B, Zhang M, Pu J, Shen S, Qu Y, Chen YJ, Huo S, Wang X, Polli JR, Balthasar JP, Herzog D, Ferrari L, Staack RF, Richter WF, Otteneider MB, Benincosa LJ, Zhou S, Vazvaei F, Qu J. High-Throughput, Sensitive LC-MS Quantification of Biotherapeutics and Biomarkers Using Antibody-Free, Peptide-Level, Multiple-Mechanism Enrichment via Strategic Regulation of pH and Ionic and Solvent Strengths. *Anal Chem*. 2019 Mar 5;91(5):3475-3483. doi: 10.1021/acs.analchem.8b05046.

QU, JUN (cont.)

Kafková L, Tu C, Pazzo KL, Smith KP, Debler EW, Paul KS, Qu J, Read LK. Trypanosoma brucei PRMT1 Is a Nucleic Acid Binding Protein with a Role in Energy Metabolism and the Starvation Stress Response. *MBio*. 2018 Dec 18;9(6). pii: e02430-18. doi: 10.1128/mBio.02430-18.

Ng AY, Tu C, Shen S, Xu D, Oursler MJ, Qu J, Yang S. Comparative Characterization of Osteoclasts Derived From Murine Bone Marrow Macrophages and RAW 264.7 Cells Using Quantitative Proteomics. *JBM Plus*. 2018 Jul 7;2(6):328-340. doi: 10.1002/jbm4.10058.

Shu S, Yang Y, Allen CL, Maguire O, Minderman H, Sen A, Ciesielski MJ, Collins KA, Bush PJ, Singh P, Wang X, Morgan M, Qu J, Bankert RB, Whiteside TL, Wu Y, Ernstoff MS. Metabolic reprogramming of stromal fibroblasts by melanoma exosome microRNA favours a pre-metastatic microenvironment. *Sci Rep*. 2018 Aug 27;8(1):12905. doi: 10.1038/s41598-018-31323-7.

Zhu X, Shen X, Qu J, Straubinger RM, Jusko WJ. Multi-Scale Network Model Supported by Proteomics for Analysis of Combined Gemcitabine and Birinapant Effects in Pancreatic Cancer Cells. *CPT Pharmacometrics Syst Pharmacol*. 2018 Sep;7(9):549-561. doi: 10.1002/psp4.12320.

Shen S, An B, Wang X, Hilchey SP, Li J, Cao J, Tian Y, Hu C, Jin L, Ng A, Tu C, Qu M, Zand MS, Qu J. Surfactant Cocktail-Aided Extraction/Precipitation/On-Pellet Digestion Strategy Enables Efficient and Reproducible Sample Preparation for Large-Scale Quantitative Proteomics. *Anal Chem*. 2018 Sep 4;90(17):10350-10359. doi: 10.1021/acs.analchem.8b02172.

Tu C, Fiandalo MV, Pop E, Stocking JJ, Azabdaftari G, Li J, Wei H, Ma D, Qu J, Mohler JL, Tang L, Wu Y. Proteomic Analysis of Charcoal-Stripped Fetal Bovine Serum Reveals Changes in the Insulin-like Growth Factor Signaling Pathway. *J Proteome Res*. 2018 Sep 7;17(9):2963-2977. doi: 10.1021/acs.jproteome.8b00135.

Pu J, An B, Vazvaei F, Qu J. Enrichment of protein therapeutics and biomarkers for LC-MS quantification. *Bioanalysis*. 2018 Jul 1;10(13):979-982. doi: 10.4155/bio-2018-0056.

Ge Y, Zhu J, Wang X, Zheng N, Tu C, Qu J, Ren X. Mapping dynamic histone modification patterns during arsenic-induced malignant transformation of human bladder cells. *Toxicol Appl Pharmacol*. 2018 Sep 15;355:164-173. doi: 10.1016/j.taap.2018.06.029.

QU, JUN (cont.)

Shen S, Wang X, Orsburn BC, Qu J. How could IonStar challenge the current status quo of quantitative proteomics in large sample cohorts? *Expert Rev Proteomics*. 2018 Jul;15(7):541-543. doi: 10.1080/14789450.2018.1490646.

Engler FA, Polli JR, Li T, An B, Otteneder M, Qu J, Balthasar JP. "Catch-and-Release" Anti-Carcinoembryonic Antigen Monoclonal Antibody Leads to Greater Plasma and Tumor Exposure in a Mouse Model of Colorectal Cancer. *J Pharmacol Exp Ther*. 2018 Jul;366(1):205-219. doi: 10.1124/jpet.117.246900.

Ayyar VS, Sukumaran S, DuBois DC, Almon RR, Qu J, Jusko WJ. Receptor/gene/protein-mediated signaling connects methylprednisolone exposure to metabolic and immune-related pharmacodynamic actions in liver. *J Pharmacokinetic Pharmacodyn*. 2018 Aug;45(4):557-575. doi: 10.1007/s10928-018-9585-x.

RAMANATHAN, MURALI

Browne RW, Jakimovski D, Ziliotto N, Kuhle J, Bernardi F, Weinstock-Guttman B, Zivadinov R, Ramanathan M. High-density lipoprotein cholesterol is associated with multiple sclerosis fatigue: A fatigue-metabolism nexus? *J Clin Lipidol*. 2019 Jul - Aug;13(4):654-663.e1. doi: 10.1016/j.jacl.2019.06.003. Epub 2019 Jun 18.

Knights J, Heidary Z, Peters-Strickland T, Ramanathan M. Evaluating digital medicine ingestion data from seriously mentally ill patients with a Bayesian Hybrid Model. *NPJ Digit Med*. 2019 Mar 22;2:20. doi: 10.1038/s41746-019-0095-z.

Fellows Maxwell K, Wahls T, Browne RW, Rubenstein L, Bish T, Chenard CA, Snetelaar L, Weinstock-Guttman B, Ramanathan M. Lipid profile is associated with decreased fatigue in individuals with progressive multiple sclerosis following a diet-based intervention: Results from a pilot study. *PLoS One*. 2019 Jun 18;14(6):e0218075. doi: 10.1371/journal.pone.0218075.

Jakimovski D, Guan Y, Ramanathan M, Weinstock-Guttman B, Zivadinov R. Life-style-based modifiable risk factors in multiple sclerosis: review of experimental and clinical findings. *Neurodegener Dis Manag*. 2019 Jun;9(3):149-172. doi: 10.2217/nmt-2018-0046.

Fellows Maxwell K, Bhattacharya S, Bodziak ML, Jakimovski D, Hagemeyer J, Browne RW, Weinstock-Guttman B, Zivadinov R, Ramanathan M. Oxysterols and apolipoproteins in multiple sclerosis: a 5 year follow-up study. *J Lipid Res*. 2019 Jul;60(7):1190-1198. doi: 10.1194/jlr.M089664. Epub 2019 May 13.

RAMANATHAN, MURALI (cont.)

Gupta S, Fellows K, Weinstock-Guttman B, Hagemeyer J, Zivadinov R, Ramanathan M. Marijuana Use by Patients with Multiple Sclerosis. *Int J MS Care*. 2019 Mar-Apr;21(2):57-62. doi: 10.7224/1537-2073.2017-112.

Vaughn CB, Jakimovski D, Kavak KS, Ramanathan M, Benedict RHB, Zivadinov R, Weinstock-Guttman B. Epidemiology and treatment of multiple sclerosis in elderly populations. *Nat Rev Neurol*. 2019 Jun;15(6):329-342. doi: 10.1038/s41582-019-0183-3.

Jakimovski D, Weinstock-Guttman B, Gandhi S, Guan Y, Hagemeyer J, Ramasamy DP, Fuchs TA, Browne RW, Bergsland N, Dwyer MG, Ramanathan M, Zivadinov R. Dietary and lifestyle factors in multiple sclerosis progression: results from a 5-year longitudinal MRI study. *J Neurol*. 2019 Apr;266(4):866-875. doi: 10.1007/s00415-019-09208-0.

Jakimovski D, Ramanathan M, Weinstock-Guttman B, Bergsland N, Ramasamy DP, Carl E, Dwyer MG, Zivadinov R. Higher EBV response is associated with more severe gray matter and lesion pathology in relapsing multiple sclerosis patients: A case-controlled magnetization transfer ratio study. *Mult Scler*. 2019 Feb 13;1352458519828667. doi: 10.1177/1352458519828667.

Guttuso T Jr, Russak E, De Blanco MT, Ramanathan M. Could high lithium levels in tobacco contribute to reduced risk of Parkinson's disease in smokers? *J Neurol Sci*. 2019 Feb 15;397:179-180. doi: 10.1016/j.jns.2019.01.009.

Ziliotto N, Zivadinov R, Jakimovski D, Bergsland N, Ramasamy DP, Weinstock-Guttman B, Ramanathan M, Marchetti G, Bernardi F. Are Plasma Levels of Vascular Adhesion Protein-1 Associated Both with Cerebral Microbleeds in Multiple Sclerosis and Intracerebral Haemorrhages in Stroke? *Thromb Haemost*. 2019 Jan;119(1):175-178. doi: 10.1055/s-0038-1676346.

Guan Y, Jakimovski D, Ramanathan M, Weinstock-Guttman B, Zivadinov R. The role of Epstein-Barr virus in multiple sclerosis: from molecular pathophysiology to in vivo imaging. *Neural Regen Res*. 2019 Mar;14(3):373-386. doi: 10.4103/1673-5374.245462.

Vaughn CB, Kavak KS, Dwyer MG, Bushra A, Nadeem M, Cookfair DL, Ramanathan M, Benedict RH, Zivadinov R, Goodman A, Krupp L, Motl RW, Weinstock-Guttman B; New York State Multiple Sclerosis Consortium. Fatigue at enrollment predicts EDSS worsening in the New York State Multiple Sclerosis Consortium. *Mult Scler*. 2018 Dec 3;1352458518816619. doi: 10.1177/1352458518816619.

Publications *continued*

RAMANATHAN, MURALI (cont.)

Ziliotto N, Zivadinov R, Jakimovski D, Baroni M, Tisato V, Secchiero P, Bergsland N, Ramasamy DP, Weinstock-Guttman B, Bernardi F, Ramanathan M, Marchetti G. Plasma levels of soluble NCAM in multiple sclerosis. *J Neurol Sci.* 2019 Jan 15;396:36–41. doi: 10.1016/j.jns.2018.10.023.

Ziliotto N, Bernardi F, Jakimovski D, Baroni M, Bergsland N, Ramasamy DP, Weinstock-Guttman B, Zamboni P, Marchetti G, Zivadinov R, Ramanathan M. Increased CCL18 plasma levels are associated with neurodegenerative MRI outcomes in multiple sclerosis patients. *Mult Scler Relat Disord.* 2018 Oct;25:37–42. doi:10.1016/j.msard.2018.07.009.

Glassman FY, Schneider JL, Ramakrishnan R, Dingman RK, Ramanathan M, Bankert RB, Balu-Iyer SV. Phosphatidylserine Is Not Just a Cleanup Crew but Also a Well-Meaning Teacher. *J Pharm Sci.* 2018 Aug;107(8):2048–2054. doi: 10.1016/j.xphs.2018.03.027.

Jakimovski D, Kolb C, Ramanathan M, Zivadinov R, Weinstock-Guttman B. Interferon β for Multiple Sclerosis. *Cold Spring Harb Perspect Med.* 2018 Nov 1;8(11). pii: a032003. doi: 10.1101/cshperspect.a032003.

SHAH, DHAVALKUMAR K.

Li Z, Li Y, Chang HP, Chang HY, Guo L, Shah DK. Effect of Size on Solid Tumor Disposition of Protein Therapeutics. *Drug Metab Dispos.* 2019 Oct;47(10):1136–1145. doi: 10.1124/dmd.119.087809. Epub 2019 Aug 6.

Meyer LF, Shah DK. Development and validation of an LC-MS/MS method for tyrphostin A9. *J Pharm Anal.* 2019 Jun;9(3):163–169. doi: 10.1016/j.jpha.2019.03.003.

Betts A, Haddish-Berhane N, Shah DK, van der Graaf PH, Barletta F, King L, Clark T, Kamperschroer C, Root A, Hooper A, Chen X. Correction to: A Translational Quantitative Systems Pharmacology Model for CD3 Bispecific Molecules: Application to Quantify T Cell-Mediated Tumor Cell Killing by P-Cadherin LP DART®. *AAPS J.* 2019 Jun 4;21(4):73. doi: 10.1208/s12248-019-0348-4.

Betts A, Haddish-Berhane N, Shah DK, van der Graaf PH, Barletta F, King L, Clark T, Kamperschroer C, Root A, Hooper A, Chen X. A Translational Quantitative Systems Pharmacology Model for CD3 Bispecific Molecules: Application to Quantify T Cell-Mediated Tumor Cell Killing by P-Cadherin LP DART®. *AAPS J.* 2019 May 22;21(4):66. doi: 10.1208/s12248-019-0332-z.

SHAH, DHAVALKUMAR K. (cont.)

Chang HY, Wu S, Meno-Tetang G, Shah DK. A translational platform PBPK model for antibody disposition in the brain. *J Pharmacokinet Pharmacodyn.* 2019 Aug;46(4):319–338. doi: 10.1007/s10928-019-09641-8. Epub 2019 May 21.

Li Z, Shah DK. Two-pore physiologically based pharmacokinetic model with de novo derived parameters for predicting plasma PK of different size protein therapeutics. *J Pharmacokinet Pharmacodyn.* 2019 Jun;46(3):305–318. doi: 10.1007/s10928-019-09639-2.

Singh AP, Guo L, Verma A, Wong GG, Shah DK. A Cell-Level Systems PK-PD Model to Characterize In Vivo Efficacy of ADCs. *Pharmaceutics.* 2019 Feb 25;11(2). pii: E98. doi: 10.3390/pharmaceutics11020098.

Singh AP, Shah DK. A “Dual” Cell-Level Systems PK-PD Model to Characterize the Bystander Effect of ADC. *J Pharm Sci.* 2019 Jul;108(7):2465–2475. doi: 10.1016/j.xphs.2019.01.034. Epub 2019 Feb 18.

Kay K, Dolcy K, Bies R, Shah DK. Estimation of Solid Tumor Doubling Times from Progression-Free Survival Plots Using a Novel Statistical Approach. *AAPS J.* 2019 Feb 8;21(2):27. doi: 10.1208/s12248-019-0302-5.

Khot A, Matsueda S, Thomas VA, Koya RC, Shah DK. Measurement and Quantitative Characterization of Whole-Body Pharmacokinetics of Exogenously Administered T Cells in Mice. *J Pharmacol Exp Ther.* 2019 Mar;368(3):503–513. doi: 10.1124/jpet.118.252858.

Bumbaca B, Li Z, Shah DK. Pharmacokinetics of protein and peptide conjugates. *Drug Metab Pharmacokinet.* 2019 Feb;34(1):42–54. doi: 10.1016/j.dmpk.2018.11.001.

Kroetsch A, Qiao C, Heavey M, Guo L, Shah DK, Park S. Engineered pH-dependent recycling antibodies enhance elimination of Staphylococcal enterotoxin B superantigen in mice. *MAbs.* 2019 Feb/Mar;11(2):411–421. doi: 10.1080/19420862.2018.1545510.

Schropp J, Khot A, Shah DK, Koch G. Target-Mediated Drug Disposition Model for Bispecific Antibodies: Properties, Approximation, and Optimal Dosing Strategy. *CPT Pharmacometrics Syst Pharmacol.* 2019 Mar;8(3):177–187. doi: 10.1002/psp4.12369.

Chang HY, Morrow K, Bonacquisti E, Zhang W, Shah DK. Antibody pharmacokinetics in rat brain determined using microdialysis. *MAbs.* 2018 Aug/Sep;10(6):843–853. doi: 10.1080/19420862.2018.1473910.

SHAH, DHAVALKUMAR K. (cont.)

Kay K, Shah DK, Rohan L, Bies R. Physiologically-based pharmacokinetic model of vaginally administered dapivirine ring and film formulations. *Br J Clin Pharmacol.* 2018 Sep;84(9):1950–1969. doi: 10.1111/bcp.13625.

SPROWL, JASON A.

Hu S, Sprowl JA. Strategies to Reduce Solute Carrier-Mediated Toxicity. *Clin Pharmacol Ther.* 2018 Nov;104(5):799–802. doi: 10.1002/cpt.1185.

Evers R, Piquette-Miller M, Polli JW, Russel FGM, Sprowl JA, Tohyama K, Ware JA, de Wildt SN, Xie W, Brouwer KLR; International Transporter Consortium. Disease-Associated Changes in Drug Transporters May Impact the Pharmacokinetics and/or Toxicity of Drugs: A White Paper From the International Transporter Consortium. *Clin Pharmacol Ther.* 2018 Nov;104(5):900–915. doi: 10.1002/cpt.1115.

STRAUBINGER, ROBERT M.

Wang J, Chan DK, Sen A, Ma WW, Straubinger RM. Tumor priming by SMO inhibition enhances antibody delivery and efficacy in a pancreatic ductal adenocarcinoma model. *Mol Cancer Ther.* 2019 Jul 30. pii: molcanther.0354.2018. doi: 10.1158/1535-7163.MCT-18-0354.

Niu J, Straubinger RM, Mager DE. Pharmacodynamic Drug-Drug Interactions. *Clin Pharmacol Ther.* 2019 Jun;105(6):1395–1406. doi: 10.1002/cpt.1434.

Luo D, Carter KA, Molins EAG, Straubinger NL, Geng J, Shao S, Jusko WJ, Straubinger RM, Lovell JF. Pharmacokinetics and pharmacodynamics of liposomal chemophototherapy with short drug-light intervals. *J Control Release.* 2019 Mar 10;297:39–47. doi: 10.1016/j.jconrel.2019.01.030.

Ma WW, Xie H, Fetterly G, Pitzonka L, Whitworth A, LeVeá C, Wilton J, Mantione K, Schihl S, Dy GK, Boland P, Iyer R, Tan W, Brady W, Straubinger RM, Adjei AA. A Phase Ib Study of the FGFR/VEGFR Inhibitor Dovitinib With Gemcitabine and Capecitabine in Advanced Solid Tumor and Pancreatic Cancer Patients. *Am J Clin Oncol.* 2019 Feb;42(2):184–189. doi: 10.1097/COC.0000000000000492.

Coleman O, Henry M, O'Neill F, Roche S, Swan N, Boyle L, Murphy J, Meiller J, Conlon NT, Geoghegan J, Conlon KC, Lynch V, Straubinger NL, Straubinger RM, McVey G, Moriarty M, Meleady P, Clynes M. A Comparative Quantitative LC-MS/MS Profiling Analysis of Human Pancreatic Adenocarcinoma, Adjacent-Normal Tissue, and Patient-Derived Tumour Xenografts. *Proteomes.* 2018 Nov 6;6(4). pii: E45. doi: 10.3390/teomes6040045.

STRAUBINGER, ROBERT M. (cont.)

Zhu X, Shen X, Qu J, Straubinger RM, Jusko WJ. Multi-Scale Network Model Supported by Proteomics for Analysis of Combined Gemcitabine and Birinapant Effects in Pancreatic Cancer Cells. *CPT Pharmacometrics Syst Pharmacol*. 2018 Sep;7(9):549-561. doi: 10.1002/psp4.12320.

Zhu X, Trueman S, Straubinger RM, Jusko WJ. Physiologically-based pharmacokinetic and pharmacodynamic models for gemcitabine and birinapant in pancreatic cancer xenografts. *J Pharmacokinet Pharmacodyn*. 2018 Oct;45(5):733-746. doi: 10.1007/s10928-018-9603-z.

Diep JK, Covelli J, Sharma R, Ruszaj DM, Kaye KS, Li J, Straubinger RM, Rao GG. Comparison of the composition and in vitro activity of polymyxin B products. *Int J Antimicrob Agents*. 2018 Sep;52(3):365-371. doi: 10.1016/j.ijantimicag.2018.05.014.

REVIEW BOARDS:

22 faculty
85 journals

XU, YING

Cui SY, Yang MX, Zhang YH, Zheng V, Zhang HT, Gurney ME, Xu Y, O'Donnell JM. Protection from amyloid β peptide-induced memory, biochemical and morphological deficits by a phosphodiesterase-4D (PDE4D) allosteric inhibitor. *J Pharmacol Exp Ther*. 2019 Sep 5. pii: jpet.119.259986. doi: 10.1124/jpet.119.259986.

Zhu X, Li W, Li Y, Xu W, Yuan Y, Zheng V, Zhang H, O'Donnell JM, Xu Y, Yin X. The antidepressant- and anxiolytic-like effects of resveratrol: Involvement of phosphodiesterase-4D inhibition. *Neuropharmacology*. 2019 Jul 15;153:20-31. doi: 10.1016/j.neuropharm.2019.04.022.

Gurney ME, Nugent RA, Mo X, Sindac JA, Hagen TJ, Fox D 3rd, O'Donnell JM, Zhang C, Xu Y, Zhang HT, Groppi VE, Bailie M, White RE, Romero DL, Vellekoop AS, Walker JR, Surman MD, Zhu L, Campbell RF. Design and Synthesis of Selective Phosphodiesterase 4D (PDE4D) Allosteric Inhibitors for the Treatment of Fragile X Syndrome and Other Brain Disorders. *J Med Chem*. 2019 May 23;62(10):4884-4901. doi: 10.1021/acs.jmedchem.9b00193.

XU, YING (cont.)

Yang Y, Chen Q, Zhao Q, Luo Y, Xu Y, Du W, Wang H, Li H, Yang L, Hu C, Zhang J, Li Y, Xia H, Chen Z, Ma J, Tian X, Yang J. Inhibition of COX2/PGD2-Related Autophagy Is Involved in the Mechanism of Brain Injury in T2DM Rat. *Front Cell Neurosci*. 2019 Feb 27;13:68. doi: 10.3389/fncel.2019.00068.

Chen L, Cui S, Yu H, Li G, Liu N, Wu Q, Zhang HT, O'Donnell JM, Wang G, Xu Y. Reduced phosphodiesterase-2 activity in the amygdala results in anxiolytic-like effects on behavior in mice. *J Psychopharmacol*. 2019 May;33(5):568-576. doi: 10.1177/0269881119832753.

Yu YC, Li J, Zhang M, Pan JC, Yu Y, Zhang JB, Zheng L, Si JM, Xu Y. Resveratrol Improves Brain-Gut Axis by Regulation of 5-HT-Dependent Signaling in the Rat Model of Irritable Bowel Syndrome. *Front Cell Neurosci*. 2019 Feb 8;13:30. doi: 10.3389/fncel.2019.00030.

Huang XF, Cao YJ, Zhen J, Zhang DW, Kong R, Jiang WT, Xu Y, Song GQ, Ke HM, Liu L. Design, synthesis of novel purin-6-one derivatives as phosphodiesterase 2 (PDE2) inhibitors: The neuroprotective and anxiolytic-like effects. *Bioorg Med Chem Lett*. 2019 Feb 1;29(3):481-486. doi: 10.1016/j.bmcl.2018.12.018.

Huang X, Xiaokaiti Y, Yang J, Pan J, Li Z, Luria V, Li Y, Song G, Zhu X, Zhang HT, O'Donnell JM, Xu Y. Inhibition of phosphodiesterase 2 reverses gp91phox oxidase-mediated depression- and anxiety-like behavior. *Neuropharmacology*. 2018 Dec;143:176-185. doi: 10.1016/j.neuropharm.2018.09.039.

Zhen L, Shao T, Luria V, Li G, Li Z, Xu Y, Zhao X. EphB2 Deficiency Induces Depression-Like Behaviors and Memory Impairment: Involvement of NMDA 2B Receptor Dependent Signaling. *Front Pharmacol*. 2018 Aug 7;9:862. doi: 10.3389/fphar.2018.00862.

Zhang C, Xu Y, Chowdhary A, Fox D 3rd, Gurney ME, Zhang HT, Auerbach BD, Salvi RJ, Yang M, Li G, O'Donnell JM. Memory enhancing effects of BPN14770, an allosteric inhibitor of phosphodiesterase-4D, in wild-type and humanized mice. *Neuropsychopharmacology*. 2018 Oct;43(11):2299-2309. doi: 10.1038/s41386-018-0178-6.

Li H, Luo Y, Xu Y, Yang L, Hu C, Chen Q, Yang Y, Ma J, Zhang J, Xia H, Li Y, Yang J. Meloxicam Improves Cognitive Impairment of Diabetic Rats through COX2-PGE2-EPs-cAMP/pPKA Pathway. *Mol Pharm*. 2018 Sep 4;15(9):4121-4131. doi: 10.1021/acs.molpharmaceut.8b00532.

XU, YING (cont.)

Xu Y, Zhu N, Xu W, Ye H, Liu K, Wu F, Zhang M, Ding Y, Zhang C, Zhang H, O'Donnell J, Pan J. Inhibition of Phosphodiesterase-4 Reverses A β -Induced Memory Impairment by Regulation of HPA Axis Related cAMP Signaling. *Front Aging Neurosci*. 2018 Jul 24;10:204. doi: 10.3389/fnagi.2018.00204.

Yang L, Han W, Luo Y, Hu X, Xu Y, Li H, Hu C, Huang D, Ma J, Yang Y, Chen Q, Li Y, Zhang J, Xia H, Chen Z, Wang H, Ran D, Yang J. Adapronitrile, a New Dipeptidyl Peptidase-IV Inhibitor, Ameliorates Diabetic Neuronal Injury Through Inhibiting Mitochondria-Related Oxidative Stress and Apoptosis. *Front Cell Neurosci*. 2018 Jul 18;12:214. doi: 10.3389/fncel.2018.00214.

Shi J, Liu H, Pan J, Chen J, Zhang N, Liu K, Fei N, O'Donnell JM, Zhang HT, Xu Y. Inhibition of phosphodiesterase 2 by Bay 60-7550 decreases ethanol intake and preference in mice. *Psychopharmacology (Berl)*. 2018 Aug;235(8):2377-2385. doi: 10.1007/s00213-018-4934-4.

Huang XF, Jiang WT, Liu L, Song FC, Zhu X, Shi GL, Ding SM, Ke HM, Wang W, O'Donnell JM, Zhang HT, Luo HB, Wan YQ, Song GQ, Xu Y. A novel PDE9 inhibitor WYQ-C36D ameliorates corticosterone-induced neurotoxicity and depression-like behaviors by cGMP-CREB-related signaling. *CNS Neurosci Ther*. 2018 Oct;24(10):889-896. doi: 10.1111/cns.12864.

Liu L, Zheng J, Huang XF, Zhu X, Ding SM, Ke HM, O'Donnell JM, Zhang HT, Song GQ, Xu Y. The neuroprotective and antidepressant-like effects of Hcyb1, a novel selective PDE2 inhibitor. *CNS Neurosci Ther*. 2018 Jul;24(7):652-660. doi: 10.1111/cns.12863.

*publication format: National Library of Medicine: Citing Medicine, 2nd edition. The NLM Style Guide for Authors, Editors, and Publishers

Grants

JULY 1, 2018 - JUNE 30, 2019

PHARMACY PRACTICE

BEDNARCZYK, EDWARD

Health Research Inc.
Buprenorphine Academic Detailing

Health Research Inc.
Opioid Prescriber Training Program

Island Peer Review Organization

Special Innovation Project 1 for Innovations that Advance Local Efforts for Better Care at Lower Costs

State University of New York

Evidence Based Clinical Research Collaboration Program

CHA, RAYMOND

University of Rochester
University of Rochester Center for AIDS Research/ URF
AWDC527703

DUNN, TERRY

ASHP Research and Education Foundation

Evaluation of Health Outcomes Associated with a Pharmacist's Telephone Intervention in Transitions of Care in Underserved Populations

JACOBS, DAVID

Cost share for UL1TR001412 funded by the National Center for Advancing Translational Sciences

A Pilot Study to Evaluate Objective Assessment Tools to Improve Medication Management in Chronic Obstructive Pulmonary Disease

UB Clinical Scholar Program in Implementation Science to Achieve Triple Aims funded by National Heart Lung and Blood Institute

Development and implementation of a chronic obstructive pulmonary disease care transition intervention integrating pharmacists onto the care team

MA, QING

Merck Sharp and Dohme Corporation

Doravirine Cerebrospinal Fluid (CSF) Pharmacokinetics in HIV-Infected Individuals

MEANEY, CALVIN

American College of Clinical

Pharmacy

T Regulatory Cell Response to Erythropoiesis Stimulating Agents Post-Renal Transplantation

American Association of Colleges of Pharmacy

Personalized Erythropoiesis in Hemodialysis Patients: The Novel PREDHICT Tool

MORSE, EUGENE

University of California at Los Angeles

ACTG Precautionary and Prohibited Medications Database (TO1)

University of California at Los Angeles

Laboratory Center (LC), AIDS Clinical Trials Group (TO4)

Fogarty International Center

Global Infectious Diseases Research Training Program

University of Rochester

Center for Health + Technology

National Institute of Allergy & Infectious Disease

Clinical Pharmacology Quality Assurance

Fogarty International Center

HIV Research Training Program

University of Rochester

University of Rochester HIV/AIDS Clinical Trials Unit

University of Rochester

Chronic Exposure to cART Predispose Older HIV Infected Individuals to CNS Injury

TORNATORE, KATHLEEN

National Institute on Aging

Age and Race Influences on Immunosuppression after Renal Transplant

TSUJI, BRIAN

Duke University
Antibacterial Resistance Leadership Group (ARLG)

National Institute of Allergy & Infectious Disease

Novel PK/PD Strategies for Polymyxin Combination against Gram-negative Superbugs

WAHLER, ROBERT

IITG

Development of a Micro-Credential on the Newly Developed Pharmacist Patient Care Process for Use in Pharmacy and Health Profession Programs: Promoting Patient-Centered Care

PHARMACEUTICAL SCIENCES

BALTHASAR, JOSEPH

Center for Protein Therapeutics

Tumor selectivity of anti-carcinoembryonic antigen scFv, scFv-ABD, and monoclonal

Center for Protein Therapeutics

Dynamic contrast enhanced magnetic resonance imaging for the prediction of monoclonal

National Cancer Institute

Catch and Release Immunotoxins: CAR-bombs for Cancer

BALU-IYER, SATHY

NYS Economic Development

UB Center for Advanced Technology in Big Data and Health Sciences

Center for Protein Therapeutics

Study viable approaches for oral delivery of colon-targeting macromolecules (e.g. targeting TNF for IBD), and understand the gut absorption mechanism following oral delivery

National Heart Lung and Blood Institute

HL-development and Pharmacology of novel lipidic rAHF and biotherapeutics

BIES, ROBERT

Merck Sharp and Dohme Corporation

Visiting Scholar: Nikhil Pillai

U.S. Food and Drug Administration

Physiologically-based model of the female reproductive tract: vaginal and intrauterine delivery components- Support New Approaches to Improve Product Manufacturing and Quality

Magee-Womens Research Institute and Foundation

Film Antiretroviral Microbicide Evaluation

U.S. Army Medical Research Acquisition Activity

Understanding the Relative Contributions of and Critical Enzymes for the Three Pathways for Intracrine Metabolism of Testicular Androgens in Advanced Prostate Cancer

BLANCO, JAVIER

Board of Trustees of the University of Alabama Birmingham

Understanding the Molecular

Underpinnings of Anthracycline-related Cardiomyopathy in Childhood Cancer Survivors

Eunice Kennedy Shriver National Institute of Child Health & Human Development

Epigenetic Regulation of FcRn Expression in Human Lung and its Role in the Disposition of Monoclonal Antibody Drugs

National Institute of General Medical Sciences

Contributions of CBRs and AKRs to the Pharmacodynamics of Anthracycline Drugs

JUSKO, WILLIAM

National Institute of General Medical Sciences

Mechanistic Pharmacokinetics and Pharmacodynamics

National Institute of General Medical Sciences

Corticosteroid Pharmacokinetics and Pharmacodynamics

KRZYZANSKI, WOJCIECH

Bristol Meyers Squibb

UB-BMS Training Program

La Jolla Pharmaceutical Corporation

Master Services Agreement: MRI Quantification of Iron Overload in Belgrade Rats

MAGER, DONALD

Beckman Research Institute of the City of Hope

Optimizing GVHD Prevention with Systems Pharmacology Models

MedImmune

Tumor Kinetic and Survival/ Dropout Modeling of Durvalumab for Multiple Cancer Types

Boston Children's Hospital

Immunologic and Neurodevelopmental Consequences of Neonatal Anemia and Thrombocytopenia and their Treatments

F Hoffmann-La Roche Limited

Mechanistic Modeling in Hematology to systematically Explore Factors Contributing to Differences in anti-CD20 Therapy Outcomes and to Inform Optional anti-CD20 Combination Strategies

Center for Protein Therapeutics

PK/PD Modeling of Liposomal IL-12 Enhancement of Human Tumor-Specific T Cell Killing In A Novel

MORRIS, MARILYN

National Institute on Drug Abuse
Gamma-Hydroxybutyrate: Toxicokinetics, Toxicodynamics and treatment Strategies

Center for Protein Therapeutics
Visualizing the Renal Disposition of Proteins and Peptides using Two-Photon Microscopy

Center for Protein Therapeutics
BCSFB transport of protein therapeutics: Influence of Type 2 Diabetes

NYUGEN, JULIANE

NYS Department of Economic Development
Bio-nanotechnology applications at SUNY Buffalo

National Institute of Biomedical Imaging and Bioengineering
RNA EXO-Codes: A novel way to reprogram pathological exosomes

National Science Foundation CAREER: Active-Loadable Poresomes for the Cytoplasmic Delivery of Membrane-Impermeable

QU, JUN

AbbVie Incorporated
Comprehensive characterization of upregulated proteases in diseased vs normal tissues

Wake Forest University Health Sciences
GMPS-GMPR axis melanoma progression and therapy

University of Rochester
Modeling Mechanisms of Adjuvanted Influenza Vaccine induced IgG Repertoire Diversity and Heterosubtypic Immunity URf

Center for Protein Therapeutics
Extensive investigation of ocular tissue disposition of antibody-drug conjugates and the ocular toxicity using novel LC-MS-based strategies

Center for Protein Therapeutics
Sensitive, accurate investigation of biotherapeutics and biomarker/target levels in both fresh and FFPE tissues, and application in Inflammatory bowel diseases

RAMANATHAN, MURALI

Otsuka Pharmaceutical Development and Commercialization Inc.
Adherence Modeling of Digital Medicine Data

National Institute of

Neurological Disorders & Stroke
Cholesterol Biomarkers and Oxysterols in Multiple Sclerosis Progression

SHAH, DHAVAL

National Institute of Allergy and Infectious Disease
Modulation of antigen pharmacokinetics with pH dependent antibody

Oncolinx LLC
Fellowship Agreement: Ashwani Verma

National Institute of General Medical Sciences
Translational Systems Pharmacokinetic Models of Novel Anticancer Biologics

Center for Protein Therapeutics
Brain Pharmacokinetics of Different Size Antibody Fragments

Center for Protein Therapeutics
Clinical Validation of Antibody PBPK Model Using 89Zr Labelled Imaging Studies

SPROWL, JASON

American Association of Colleges of Pharmacy
Regulation of SGLT1 function by tyrosine kinase inhibitors

STRAUBINGER, ROBERT

National Cancer Institute
Large-scale proteome-wide analysis with high accuracy/precision to guide pancreatic cancer therapy development

Royal Society of Chemistry
Short term visit by UCD graduate student Cara Moloney

Ipsen Bioscience Incorporated
Ipsen Es1e 2017-19

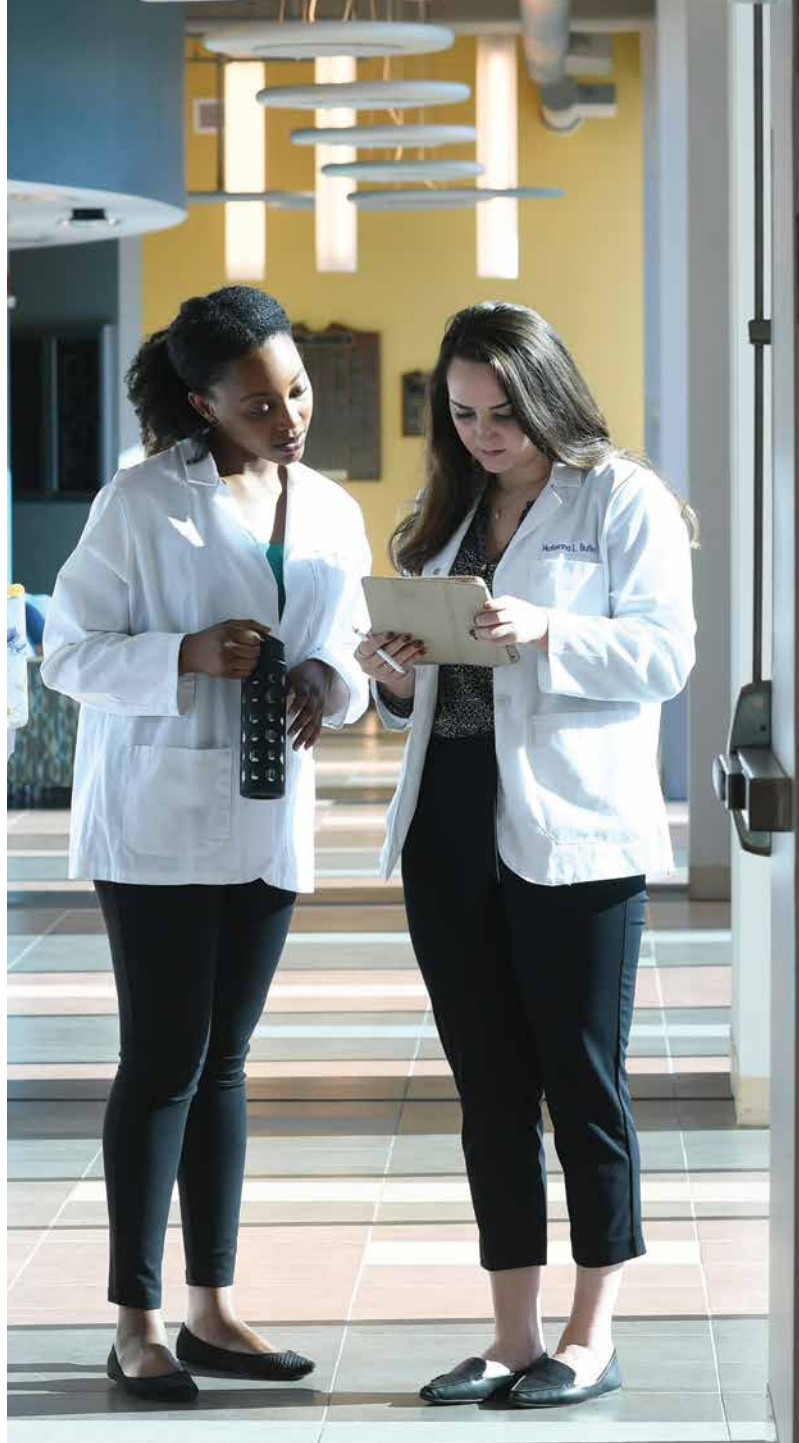
Center for Protein Therapeutics
Multiparametric MRI-based physiological imaging to predict mAb penetration and efficacy in pancreatic cancer

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

XU, YING

Tetra Discovery Partners
SBIR - Phosphodiesterase-4B (PDE4B) Inhibitors for Psychiatric Disease



The UB School of Pharmacy and Pharmaceutical Sciences has a

TOP 20

ranking for extramural research funding.*

* PER THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY (AACP) 2017-18 RESEARCH RANKINGS



University at Buffalo

School of Pharmacy and
Pharmaceutical Sciences

Office of External Affairs
288 Pharmacy Building
Buffalo, NY 14214-8033



BOLDLY BUFFALO

THE CAMPAIGN FOR UB

Bold means driving scientific discovery.

Whether it's developing diagnostic tools to help prevent diseases, researching ways to create personalized, patient-tailored medicine, or leading the next revolution of care, we make a huge impact on our community and around the globe.

The Boldly Buffalo campaign provides countless opportunities for students to discover their passions and achieve their dreams. To learn how you can help create a better world, visit buffalo.edu/campaign.