

UAMS Department of Pharmacology & Toxicology

Alumni Newsletter (August 2017 to December 2018)



Inside this issue:

<i>Letter from the Chair</i>	2
<i>Teaching Award</i>	2
<i>Retirements</i>	3-4
<i>Faculty Recognition</i>	5-7
<i>Faculty Awards</i>	8-9
<i>SPaT T32 Program</i>	10-11
<i>New Students</i>	11
<i>Research Induction</i>	12
<i>Graduate Recognition</i>	13-17
<i>New Arrivals</i>	18
<i>Alumni Updates</i>	19-24

WELCOME ALUMNI!

Dear Alumni and Friends,

Time has flown by since Summer of 2017, when we last sent a newsletter to the Alumni and Friends of the UAMS Department of Pharmacology & Toxicology. We hope this period of time has brought happiness and good memories for you and your families.

The current newsletter is intended to update you belatedly on recent department accomplishments and events, and also serve as an opportunity to share news from other alumni with you. We hope to provide a 2019 update at the end of the year.

From the bird's eye view, the UAMS College of Medicine continues to adapt to rapidly changing clinical and research environments, and the environment in Washington DC makes this process even more interesting! Since you last heard from us, we have a new chancellor for UAMS, Dr. Cam Patterson, a cardiologist, physician-scientist and businessman, who moved to UAMS from New York Presbyterian Hospital and Cornell University. We also have a new dean of the College of Medicine, Dr. Christopher Westfall, formerly the chair of the UAMS Department of Ophthalmology. While our clinical colleagues adapt to the challenging patient care environment, our research programs are rebounding after record-low funding levels at NIH.

We're glad to report that under the directorship of Dr. Philip Mayeux, our NIGMS-funded T32 Training Program for predoctoral students was competitively renewed in 2018 for another 5 years. Our graduating trainees are obtaining postdoctoral, government and biotech positions as we strive to enhance our research, teaching and service missions.

Best wishes as you enjoy the remainder of 2019, and wherever you live, please stay in touch!

Galen Wenger PhD, Professor Emeritus and Alumni Chair

Nancy Rusch PhD, Professor and Department Chair

DR. RHEE GETS THE GOLDEN APPLE...AGAIN!



Sung Rhee, PhD, an Associate Professor in the department, received the 2018 sophomore Golden Apple Award, for the third consecutive year! Dr. Rhee, pictured left receiving the award, was voted best teacher in 2016, 2017 and 2018 by the sophomore medical students for his directorship and lectures in the cardiovascular block.

Some of the comments by students this year, which were uniformly positive, included, "It was a privilege to be taught by Dr. Rhee. It is clear he wants his students to succeed and he does everything in his power to help us understand the material. He spends countless hours reviewing step material and learning our names"; "I can't say enough things about Dr. Rhee to express what an outstanding educator he is.

He personally sat in on lectures in other modules to see what we've been taught so far that impacts his material" and "Dr. Rhee has a way of organizing this class in a way that makes sense to students who know nothing about cardiovascular topics. Not only did he teach us well, he actually took the time to learn what we needed to learn and how we needed to learn".

The Golden Apple Award is given annually at the medical school graduation to one faculty member in each year of the curriculum.

DR. JOHN CROW RETIRES

Dr. John Crow retired from the Department of Pharmacology and Toxicology in June 2018. He was recruited to UAMS in 2003 as professor, after serving as assistant professor and associate professor in the Departments of Anesthesiology, Pharmacology/Toxicology, Cell/Molecular Biology, and the Free Radical Center at the University of Alabama at Birmingham from 1992 - 2003. He also served as the director of the J. Thomas May Center for ALS Research at UAMS from 2008 to 2016.

Dr. Crow received his master's degree in medicinal chemistry from the School of Pharmacy at Auburn University in 1986, and was awarded a PhD in biochemical pharmacology from the College of Medicine at the University of South Alabama in 1991. Subsequently, he was a post-doctoral fellow in the laboratory of Dr. Joe McCordat in the Webb-Waring Lung Institute at the University of Colorado Medical Center. Dr. McCordat is the co-discoverer of superoxide dismutase (SOD1). He then took an instructor position in the laboratory of Dr. Joe Beckman, the discoverer of peroxynitrite, at the University of Alabama, Birmingham. In 1993, he attained the position of assistant professor at UA Birmingham, and worked extensively in the nitric oxide and free radical biochemistry fields. The seminal discovery that SOD1 mutations cause ALS (by a Harvard group in 1993) led to a joint research interest in free radical biology and neurodegenerative diseases.



Dr. Crow served as mentor to several graduate students during his tenure at UAMS, in addition to teaching in multiple courses, most recently acting as course director for the grant-writing component of the Scientific Ethics and Communication Course. He was the recipient of six NIH awards (4 R01's), seven Foundation awards (American Heart Association, ALS Association, Muscular Dystrophy), and three sponsored research agreements totaling over \$5.4M. The J. Thomas May Center for ALS Research received more than \$2M in philanthropic donations to pay for therapeutics development. Dr. Crow authored 63 papers, reviews, and book chapters.

During retirement, Dr. Crow is writing articles for lay science publications, doing freelance consulting for local private practice physicians, and plans to mentor dermatology residents in grant and manuscript writing. He is enjoying his retirement immensely, and has become a drone enthusiast thanks to the kind retirement gift given to him by the department (see photo on right, taken from his drone). He maintains an adjunct faculty appointment while a request for professor emeritus status works its way through the system.



DR. JOSEPH STIMERS RETIRES

Dr. Joseph Stimers retired from the Department of Pharmacology and Toxicology in September 2017. Dr. Stimers joined the department in 1989 as assistant professor, achieving the rank of professor in 2003. He also served as graduate faculty for the UAMS Graduate School from 1990 until his retirement.



Dr. Stimers received his PhD from the University of Southern California in 1982. He completed a post-doctoral fellowship with Dr. Melvyn Lieberman at Duke University Medical Center from 1985 to 1987. Subsequently, he served as a medical research assistant professor in the Department of Cell Biology, Division of Physiology, at Duke University until he was recruited to UAMS in 1989.

During his career at UAMS, Dr. Stimers (*shown at left with Chair, Dr. Nancy Rusch and wife, Jean*) taught in many courses. He was course director for the Medical Pharmacology Course for sophomore medical students, and directed and/or taught in General Principles of Pharmacology and Toxicology; Pharmacology for Graduate Students; Cardiovascular Pathophysiology and Therapy; Neuropharmacology; and Molecular Pharmacology and Toxicology. He was honored with the UAMS Red Sash Award in 1998, 2003, and 2008-2010. Dr. Stimers mentored and served on many dissertation committees for graduate students and postdoctoral fellows. He also reviewed grants for the American Heart Association and the NIH. He published over 50 publications and book chapters.

MR. TERRY FLETCHER RETIRES



In December 2018, the department honored Mr. Terry Fletcher for his service to UAMS. Mr. Fletcher was a research associate in Dr. Rusch's laboratory and a member of the department since 2007. During the 30 years he worked at UAMS, he was a member of eight different laboratories. In 2015, he and Jeff Hausen launched the "basic science equipment and technical support core", which provides technical assistance to all UAMS basic science departments.

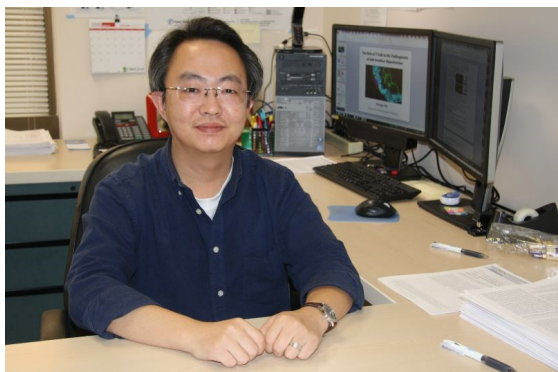
Mr. Fletcher was the "go to" person for the entire department (and beyond) for anyone in need of advice on equipment or technical help.

He would often handcraft small technical items at home at night and appear at work the next morning with the perfect fix for a critical experiment. His desire to help went beyond the office. He chose to be "on call" around the clock to handle equipment and computer emergencies. On his own time, he helped international students find the best used cars, fixed people's furnaces, drove people to appointments and showed an unusual level of kindness. Terry was honored with the Research Staff Excellence Award at the 2013 Dean's Honor Day.

Mr. Fletcher suffered a stroke in 2017, ultimately resulting in his decision to retire. The department gifted him with a recumbent bike at his retirement celebration before the annual holiday party.

FACULTY RECOGNITION

Dr. Shengyu Mu



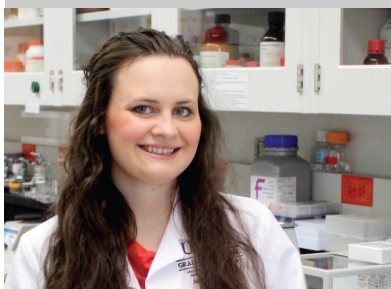
Shengyu Mu, PhD, was promoted to assistant professor in the basic scientist tenure path in 2017. He was an assistant professor on the research path in the department since 2013. Before coming to UAMS, Dr. Mu received his medical degree from TianJin Medical University in China and was awarded the PhD degree from the University of Tokyo in Japan. Mechanisms of salt-sensitive hypertension and blood pressure regulation are Dr. Mu's areas of research interest.

Dr. Mu's research on hypertension has been published in high impact journals including authorships in *Nature Medicine*, *Journal of Clinical Investigation*, and most recently as a new faculty member, in *Nature Communication*.

He has been recognized by several national awards, including a Beginning Grant-in-Aid from the American Heart Association (AHA) in 2015, the New Investigator Award from the AHA Kidney Council in 2016, and the Research Recognition Award from the American Physiological Society (APS) Renal Section in 2017. He also was an invited speaker last year for an American Physiological Society symposium during the 2018 Experimental Biology meeting, and recently he was recruited by the NIH Center for Scientific Review to serve as an early career reviewer.

In addition to the AHA, Dr. Mu's research projects have been funded by UAMS foundation funds and a Medical Research Endowment award from UAMS. The latter pilot award supports a new project that investigates the role of renal lymph-angiogenesis in salt-sensitive hypertension. In 2019, Dr. Mu was awarded a New Investigator R01 grant from the NIH to explore renal mechanisms of salt-sensitive hypertension.

Dr. Amanda Stolarz



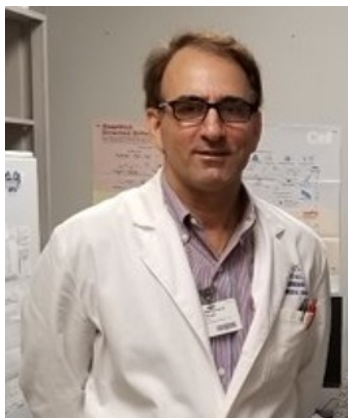
Amanda Stolarz, PharmD, PhD, was promoted on July 1, 2018, to the position of assistant professor on the tenure track in the Department of Pharmaceutical Sciences in the UAMS College of Pharmacy. Dr. Stolarz was awarded the PharmD degree from the UAMS College of Pharmacy in 2013, and was awarded a PhD degree in 2016 from UAMS graduate school for her dissertation research in the Department of Pharmacology & Toxicology. She was a postdoctoral fellow in the laboratory of Dr. Nancy Rusch and lectured in the College of Pharmacy as a trainee until her promotion to assistant professor.

Dr. Stolarz was the recipient of a PhRMA award in 2016, and was a member of a bioscience entrepreneurship team (Rejuvenics Technologies, LLC) that won the Donald W. Reynolds Governor's Cup business-plan competition in 2017. She recently received a promising score on a R21 application to the NIH.

Her research interests include mechanisms of chemotherapy-related lymphedema and pharmacotherapies to preserve lymphatic function in cancer patients.

FACULTY RECOGNITION

Dr. Mahmoud Kiaei



Dr. Mahmoud Kiaei will be promoted to associate professor on July 1, 2019. He joined the department in 2016. Dr. Kiaei received his PhD degree from the University of Otago in New Zealand, and worked at the Weill Cornell Medical College in New York before coming to UAMS in 2011. He started his career at UAMS in the Department of Neurobiology and Developmental Sciences.

Dr. Kiaei's laboratory has developed mouse models of motor neuron disease, and uses animal models in pre-clinical studies of diseases including ALS to unravel mechanisms of neurodegeneration. His laboratory is pursuing drug discovery strategies with the ultimate goal of fulfilling the unmet need of patients for new medications to treat ALS. His research recently was mentioned in *The Scientist*, "New ALS therapies move closer to the clinic" and he also was highlighted in the online site *Alzforum*, "ALS mutations stiffen profilin, steer protein toward aggregation".

Dr. Kiaei was an invited speaker in 2018 at the International Conference on Neurology and Brain Disorders in Valencia, Spain. The focus of this conference was on advancements and challenges in neurosciences and brain disorders. His keynote presentation was on neurodegenerative disorders and the title of his talk was "Mutant profilin1 transgenic mice recapitulate cardinal features of motor neuron disease".

Dr. Kiaei founded a new biotech company in 2018 called RockGen Therapeutics, which plans to develop novel drugs to treat neurodegeneration. RockGen is working on a proprietary technology developed in Dr. Kiaei's laboratory, which includes a novel class of compounds (RGB-101, RGB-102, and RGB-103) with pluripotent activity to protect neurons. These new compounds may hold promise for patients with neurodegenerative diseases including ALS. For more information visit Rockgen's website; www.rockgenbio.com

Dr. Alexei Basnakian



Dr. Alexei Basnakian received several awards during 2018. He is principal investigator on a new subcontract from the U.S. Department of Agriculture, which is titled "Environmental risk assessment of carbon nanomaterials used as plant growth regulators". He also serves as director of the Cellular and Molecular Toxicology Core for a COBRE grant titled "Center for studies of host response to cancer therapy" (PI, Dr. Martin Hauer-Jensen). He also serves as a mentor to Dr. Abrar Alam at Arkansas State University in Jonesboro, AR, on his new Arkansas Biosciences Institute grant. In September 2018, Dr. Basnakian

became the director of the Scientific Communication and Ethics 3 & 4 (grant writing) graduate course, which is traditionally led by departmental faculty. This past summer, he also achieved his childhood dream of visiting Alaska with his family, seeing grizzly bears, fishing for halibut, travelling down the Yukon river, and reaching beyond the Arctic Circle.

FACULTY RECOGNITION

Dr. Lisa Brents

Lisa Brents, PhD was appointed to the rank of assistant professor in the research path in 2018. On July 1, 2019, she will assume the position of assistant professor on the tenure path. Dr. Brents earned her PhD degree from the Department of Pharmacology and Toxicology in 2013. She was a postdoctoral fellow in the UAMS Psychiatric Research Institute's Brain Imaging Center until 2016. After receipt of a Fellow-to-Faculty Award from the College of Medicine, she returned to the Department of Pharmacology and Toxicology to establish an independent research program. Her research focuses on defining active metabolites of buprenorphine that cause neonatal abstinence syndrome (NAS). NAS occurs in newborns with chronic prenatal exposure to opioids (including heroin, oxycodone, and fentanyl), which cause physical dependence and withdrawal symptoms during the first weeks of life.



Dr. Brents became a KL2 Scholar of the UAMS Translational Research Institute in 2017, selected from a large pool of applicants, for her project "The metabolic and pharmacodynamics profile of deuterated buprenorphine". The 2-year KL2 Mentored Research Career Development Award supports her efforts to improve buprenorphine treatment of opioid use disorder during pregnancy by chemically modifying the parent drug to reduce fetal exposure.

Dr. Brents gave an oral presentation and poster at the 2019 Experimental Biology meetings, a rare honor for an early stage investigator. She recently received a promising score as the principal investigator of a NIH R21 application.

Dr. Nirmala Parajuli

Nirmala Parajuli, PhD was promoted from instructor to assistant professor on the research path in 2018. She has established a laboratory as an independent investigator at the Arkansas Children's Research Institute (ACRI) with start-up support from a Fellow-to-Faculty Award from the College of Medicine, and support from the Arkansas Bioscience Institute, ACRI and a COBRE grant (PI, Dr. Alan Tackett).

Dr. Parajuli earned her PhD degree in 2009 from Innsbruck Medical University in Austria, and was a postdoctoral fellow in the laboratory of Dr. Lee Ann MacMillan-Crow from 2009 to 2016. Her research focuses on unveiling molecular mechanisms responsible for cold storage (CS)-induced renal damage with a focus on developing therapeutics to improve renal outcome after transplantation.



Dr. Parajuli is the recipient of a 2019 Medical Research Endowment award from UAMS for her project titled "Novel role of heat shock protein 72 during renal cold storage plus transplantation". She also was the recipient of a highly competitive Scientist Development Grant from the American Heart Association in July 2016, and received a Barton Pilot Award in June 2017 for her proposal titled "Novel role of immunoproteasome during renal cold storage and transplantation". She has submitted her first R01 grants as principal investigator to the NIH.

FACULTY AWARDS

Drs. Gray and Rusch receive AAMC award

In less than three years, the Health Sciences Entrepreneurship Boot Camp has gone from pilot project to national award winner, recently earning a second place for Innovations in Research and Research Education Award from the Association of American Medical Colleges (AAMC).

Dr. Nancy Gray, professor in the Department of Pharmacology and Toxicology and president of BioVentures, and Dr. Nancy Rusch, professor and chair in the Department of Pharmacology and Toxicology, developed the curriculum for a week-long boot camp for UAMS graduate students in 2016. They were awarded a supplemental grant to the department's NIH-funded T32 Training Program in Systems Pharmacology and Toxicology (SPaT), which is directed by Dr. Philip Mayeux. Using these funds and support from the UAMS Translational Research Institute, they launched the first boot camp in entrepreneurship in partnership with the Sam M. Walton College of Business at the University of Arkansas at Fayetteville.



The first class at UAMS was composed of PhD students, MD/PhD students, and post-doctoral fellows. Two of the students started their own companies after completing the course. Subsequently, Dr. Gray expanded the boot camp into a one-week residential course held on the campus of the University of Central Arkansas. Last year, it enrolled 18 undergraduate students from 10 colleges and UAMS. Two teams competed in the Donald W. Reynolds Governor's Cup collegiate business plan competition with one team winning the \$25,000 top prize. At the suggestion of Lawrence Cornett, Ph.D., and with support from the INBRE program he leads, the Boot Camp in 2017 was turned into a residential program on the campus of UCA for undergraduates and recent graduates from as many as 15 Arkansas universities and colleges. In May 2018, 17 students graduated from the Boot Camp, bringing the total number of graduates to 51. The residential Boot Camp also receives support from UCA, Conway Regional Medical Center and the Arkansas business community.

"The original boot camp for PhD and MD/PhD students was designed to give our trainees a crash course on business principles and the customer discovery process to determine whether a discovery may actually have market value," Dr. Rusch said. "The National Institutes of Health also has taken a major interest in equipping trainees with entrepreneurial skills".

Now, the growing Boot Camp is a joint initiative of UAMS, Arkansas INBRE, BioVentures and The Conductor, a public-private partnership with the University of Central Arkansas (UCA) in Conway, and Startup Junkie. Arkansas INBRE (IDeA Networks of Biomedical Research Excellence) helps build research infrastructure across the state. The curriculum is designed to give Boot Camp students the knowledge and tools they need to think critically, learn entrepreneurial principles and launch innovative ventures. Additionally, the camp offers leadership, team building and other recreational experiences.

Gray said although there are quite a few entrepreneurship boot camps, having one focused on health sciences is unique. The program also has drawn students from diverse backgrounds, more than half have been women, 25 percent African-American, 10 percent Hispanic and 8 percent Asian.

FACULTY AWARDS

Mayeux receives renewal for SPaT

A prestigious grant was competitively renewed for 5 years in 2018 for \$742,840, which gives PhD and MD/PhD students in the biomedical sciences at UAMS an added foundation in pharmacology and toxicology research.



The National Institute of General Medical Sciences (NIGMS) first awarded the Institutional Predoctoral Research Training Grant (T32) to the Department of Pharmacology and Toxicology in 2013. The funding has allowed the department's Systems Pharmacology and Toxicology (SPaT) Training Program to provide two trainees with a stipend, specialized coursework, research mentorship, and training in entrepreneurship, career development, networking, leadership and grant writing. UAMS provides a matching stipend for an additional SPaT trainee each year other student annually using funding from the UAMS Translational Research Institute, UAMS

College of Medicine and Arkansas Biosciences Tobacco Research Committee provide matching funding for the grant, allowing there to be one additional SPaT trainee each year along with the two funded by the federal grant.

"The prestige of the grant helps us recruit the best trainees from across the country to our program," said Philip Mayeux, PhD, SPaT program director and professor in the Department of Pharmacology and Toxicology.

UAMS is one of only 31 pharmacology and toxicology training programs in the nation to receive the funding. Others include Vanderbilt University, Emory University, Harvard Medical School and Johns Hopkins School of Medicine.

"We are the smallest program to receive funding, and renewal was by no means guaranteed," said Mayeux, who wrote the original and renewal grants for the funding with help from several other faculty members. "We had a site visit and the reviewers were impressed with our trainee's publications, awards and national recognition." The trainees come from a variety of research areas, but combine these interests with a focus on pharmacology and toxicology. Trainees supported by the first grant worked on drug abuse and behavior; cancer; drug toxicity; and bone, kidney and cardiovascular health.

"The ultimate goal is increasing drug discovery and drug development to benefit patients," Dr. Mayeux said. "We would like to have more biomedical scientists in industry and academia who also have a background in drug development, so that – even if they don't directly develop the drugs themselves – they know how to work collaboratively with pharmacologists to help scientific discoveries translate from bench research to the development of medications and therapeutic interventions."

Thirty-one UAMS faculty have partnered with the SPaT training program to provide training and mentorship. SPaT represents a partnership between the UAMS' Graduate School, College of Public Health and College of Pharmacy; Arkansas Children's Research Institute; and the National Center for Toxicological Research, which is part of the Food and Drug Administration.

2018 SPaT SYMPOSIUM



The NIGMS-funded Systems Pharmacology and Toxicology (SPaT) T32 Training Grant hosted its annual symposium in May 2018. The annual event was attended by SPaT training faculty, departmental faculty, and students from the Pharmacology, Interdisciplinary Toxicology, and GPIBS (Graduate Program for Interdisciplinary Biomedical Sciences) graduate programs.

The invited speaker for the 2018 symposium was Dr. Sarah England from Washington University School of Medicine. Dr. England presented a seminar titled “Translational studies on the oxytocin receptor: A personalized medicine approach”. She is Professor of Obstetrics and Gynecology and the Alan A. and Edith L. Wolf Professor of Medicine. She also serves as Associate Director of the Center for Reproductive Health Services and is an Associate Program Director of the March of Dimes Prematurity Research Center at the School of Medicine.

Dr. England is pictured above with 2017-2018 SPaT trainees. Front Row: Bill Hyatt, Lascelles Lyn-Cook, Dr. England, Chuck Hay, and Lucas DeYoung. Back Row: Brittney Garner, Dolapo Adejumobi, Samantha McClenahan, Julia Tobacyk, Stephen Shrum, Ryan MacLeod, Brian Koss, and Laura Ewing.

Dr. Philip Mayeux serves as director of the NIH/NIGMS-funded T32 Training Grant, which includes more than 30 training faculty from the Colleges of Medicine, Pharmacy, Public Health, Arkansas Children’s Hospital, and the FDA-funded National Center for Toxicological Research (NCTR). The five-year grant supports four PhD graduate students each year. Additional support is provided by the UAMS College of Medicine and Translational Research Institute to support a fifth student.

The training program consists of didactic training in pharmacology, toxicology, physiology, pharmacokinetics, metabolism, biostatistics, grant writing, and the responsible conduct of research (RCR). The trainees’ dissertation projects must use an animal model of human disease or involve clinical studies.

NEW SPaT TRAINEES IN 2018-2019



Four students were selected to be SPaT scholars in 2018-2019. Melissa Clemens (*above left*) and Mary "Allie" Davis (*upper, second from left*) are the NIGMS recipients, who will receive two years of funding. Melissa (mentor, Dr. Mitchell McGill) received her undergraduate degree from the University of Central Arkansas in 2004, and her MPH from UAMS in 2016. Her research project is "Mechanisms and biomarkers of liver regeneration after APAP-induced hepatotoxicity". Allie (mentor, Dr. Grover Paul Miller) graduated with a B.S. from Henderson State University in 2017. Her dissertation project is titled: "Structure-activity relationships in the bioactivation of halogen-containing drugs and its role in drug-induced hepatotoxicity".

Caitlin Caperton (*upper, second from right*) is the UAMS-funded SPaT scholar, who will receive one year of funding. Caitlin (mentor, Aime Franco) received her B.A. from University of Arkansas at Little Rock in 2015. Her research project is titled, "Immune microenvironment and stromal remodeling associated with follicular thyroid cancer."

Kyle Urquhart (*upper right*) will receive the final eight months of funding for Lucas DeYoung, following DeYoung's return to medical school. Kyle (mentor, Dr. Bill Fantegrossi) received his PhD from the University of Georgia. His dissertation title is "Tolerance and dependence liability to fentanyl and Fentanyl analogues."

NEW GPIBS STUDENTS IN 2018-2019



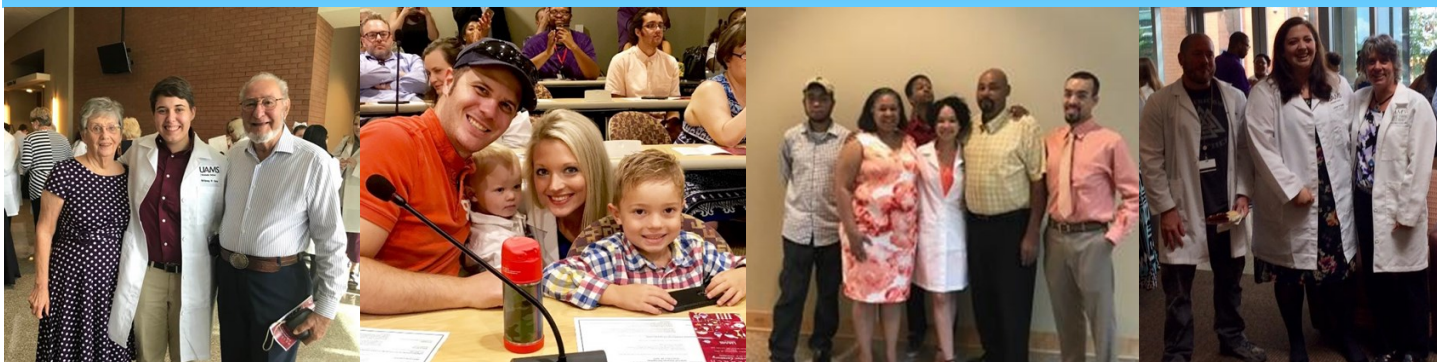
The department admitted three students in 2018 in the Pharmacology, Toxicology and Therapeutics graduate track of the Graduate Program in Biomedical Sciences (GPIBS), the umbrella admissions program for PhD students in the College of Medicine. In addition to Melissa Clemens (*pictured above*), James David Henry (*left*) is a MD/PhD student in the laboratory of Dr. Sung Rhee. James received his undergraduate degree from Davidson College and his masters degree from Tulane University School of Public Health and Tropical Medicine.

His research interests are the role of adrenergic receptors in leptomeningeal collateral arterial blood flow.

Amal Shoieb (*right*) received her undergraduate degree from Misr International University in Egypt. Her research interests are the development of cannabinoid receptor biased agonists for potential improvement of the safety and efficacy of therapeutic agents. Her mentor is Dr. Paul Prather.



RESEARCH INDUCTION CEREMONY 2017



These graduate students were inducted into the PhD program in September 2017. Brittney Garner (*left*) is co-mentored by Dr. Nancy Rusch and Dr. Shengyu Mu. Her research project is “Unrecognized participation of the lymphatic system in medication side effects and development of salt-sensitive hypertension”.

Samantha McClenahan (*second from left*) is mentored by Dr. Michael Owens. Her research title is “Development of an enantiomeric specific vaccine for 3,4-methylenedioxypyrovalerone (MDPV) abuse”.

Catheryn Wilson (*second from right*) is co-mentored by Dr. Bill Fantegrossi and Dr. Paul Prather. Her research project is titled “In vivo and in vitro effects of synthetic cannabinoids AB-PINACA, 5F—AB-PINACA, and 5F-ADB-PINACA”.

Lauren Russell (*right*) is also mentored by Dr. Bill Fantegrossi. Her research title is “Investigating the effects of environmental conditions of the toxicity of the synthetic cathinone 3,4-methylenedioxypyrovalerone (MDPV)”.

RESEARCH INDUCTION CEREMONY 2018



These students received their white coats at the 2018 Research Induction Ceremony. Laura Ewing (*left*) is mentored by Dr. Igor Koturbash (College of Public Health). Her project is titled “Role of methionine-gut microbiome interaction in radiation-induced gastrointestinal toxicity”.

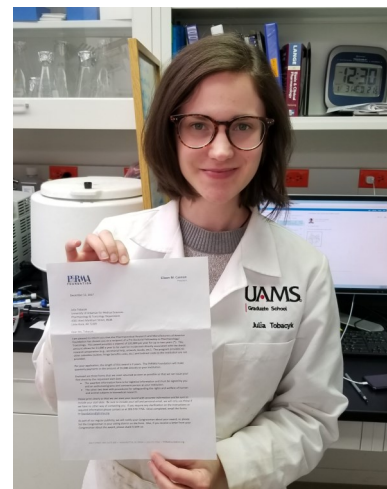
Christian Cabanlong (*second from left*) is mentored by Dr. Paul Prather. His research project is titled “Synthetic cannabinoids act as CB1 receptor biased agonists to induce adverse effects.” Also mentored by Dr. Prather is Amal Shoieb (*second from right*). Her dissertation title is “Development of cannabinoid receptor biased agonists for potential improvement of the safety and efficacy of therapeutic agents”.

Kyle Urquhart (*right*) is mentored by Dr. Bill Fantegrossi. His research title is “Tolerance and dependence liability to fentanyl and fentanyl analogues”.

GRADUATE STUDENT RECOGNITION

Julia Tobacyk Receives 2018 PhRMA Award

Julia Tobacyk received a predoctoral fellowship in pharmacology and toxicology awarded by the PhRMA (Pharmaceutical Research and Manufacturers of America) Foundation for research in the field of kidney transplantation. These are competitive and nationally recognized awards which provide \$20,000 annually for the awardee's stipend and a small spending allowance for their research. Julia's project titled "The regulation of mitochondrial fusion in cold storage kidney preservation" focuses on elucidating specific pathways involved in mitochondrial fusion that are altered during renal transplantation. Additionally, she will examine the therapeutic potential of several agents designed to block renal and mitochondrial injury using cell and rat models of transplantation. Julia's dissertation advisor is Dr. Lee Ann MacMillan-Crow.



Laura Ewing Receives 2019 PhRMA Award

Laura Ewing also was a recipient of a predoctoral fellowship award by the PhRMA Foundation. Her project, "Role of methionine-gut microbiome interaction in radiation-induced gastrointestinal toxic", focuses on studying the mechanism of toxicity underlying methionine supplementation, the microbiome, and the development of radiation-induced gastrointestinal syndrome (RIGS) with a partial-body irradiation or stereotactic body radiotherapy scheme (to mimic both conventional and new radiotherapy paradigms). She plans to use the data to parameterize a computational model relating tissue concentration of methionine to external methionine and radiation doses in mice to translate the findings to humans in order to develop mitigation strategies. Her dissertation advisor is Dr. Igor Koturbash in the College of Public Health.



Samantha McClenahan Receives F31 Award

Samantha McClenahan (mentor, Dr. S. Michael Owens) was awarded an NIH predoctoral fellowship award (F31) in 2018 for her project, "Development of an enantiomeric specific vaccine for 3,4-methylenedioxypyrovalerone (MDPV) abuse". Funding is provided for as long as three years.

The goal of the project is to characterize and test an MDPV protein-conjugated vaccine against the stimulant effects of MDPV and alpha-PVP. Specifically, she proposes to determine the immunochemical characterization of the pAb response in rats and evaluate the ability of the vaccine to protect against the MDPV-induced cardiovascular, locomotor, and reinforcing effects.



GRADUATE STUDENT RECOGNITION

2019 ASPET Washington Fellows

Congratulations to Brittney Garner and Lauren Russell, who were selected as 2019 ASPET Washington Fellows. The mission of the ASPET Washington Fellows Program is to enable early career scientists interested in science policy to learn about and become more engaged in public policy issues. This program helps fellows develop the skills and insights to become future leaders in science.

This year's Washington Fellow's class includes 10 graduate students from across the country with sterling academic credentials and a demonstrated interest in how legislation and policy affects the pharmacology profession. We are proud that UAMS Pharmacology and Toxicology students hold two of these ten slots!



For the first time in program history, all ten Fellows will arrive in Washington, D.C. on the same day to hear from legislative staff and scientists in the policy profession, be trained in advocacy by members of ASPET, and speak with their legislators about how to address the challenges facing the scientific community. They also will serve as advocates for their home districts, and they attended the ASPET Annual Meeting at EB 2019 in Orlando, Florida, where they had the opportunity to network with each other and fellows from previous years.

Brittney Garner is co-mentored by Drs. Nancy Rusch and Shengyu Mu. Her dissertation project focuses on the contribution of the lymphatic circulation to medication side effects and the development of salt-sensitive hypertension. Brittney is a past SPaT trainee. In addition to completing the coursework required of a PhD student, she has obtained a graduate certificate in regulatory sciences from the College of Public Health. As an ASPET fellow, Brittney hopes to expand her knowledge of regulatory science by gaining a deeper knowledge of how science policy decisions are made at the federal and state levels.



While attending her undergraduate institution, Lauren Russell was involved in establishing the Natural Resource Research Center that eventually contracted with local industries to test water samples. This experience gave Lauren her first exposure to science policy, and building on this interest, she received a graduate certificate in regulatory science while in graduate school. Currently, her dissertation research focuses on behavioral pharmacology and assessing the potential abuse liability and

behavioral and neuro toxicities associated with novel psychoactive substances. Because of her growing interest in regulatory sciences, Lauren is working on a separate project developing and implementing a survey regarding the effectiveness of medical cannabis. One goal of this survey is to identify and collect quantitative data that will benefit policy makers. As an ASPET Washington Fellow, Lauren hopes to learn more about how public policy decisions are made and how scientists can help influence these decisions, so she can effectively advocate for research at the state and federal levels during her career. Her mentor is Dr. Bill Fantegrossi.

GRADUATE STUDENT RECOGNITION

Catheryn Wilson Receives Recognition

Catheryn Wilson (*pictured far right*) received three awards in 2018 for her research project, “Convulsant and seizure-like effects of synthetic cannabinoids JWH-018 and 5F-AB-PINACA in mice: Observational signs and in vivo electroencephalography.” Catheryn is a graduate student in the laboratories of Drs. Paul Prather and Bill Fantegrossi.

Catheryn won first place in the graduate student poster competition at the Arkansas Chapter of the Society for Neuroscience in February. She was then selected as 1 of 3 Best Presentation Award winners in the oral competition at the Behavioral, Biology and Chemistry (BBC) Translational Research in Addiction Conference in March 2018. Finally, Catheryn also placed first in the student poster competition at the 2018 Neural Meeting at the University of Alabama, Birmingham.



Chris Bolden Receives SREB Fellowship

Chris Bolden (mentor, Dr. Eric Peterson) was awarded the Southern Regional Education Board (SREB) Fellowship in 2018. This predoctoral fellowship award is sponsored by the NSF to train PhDs to teach undergraduates and above. Chris (*pictured far right*) is a student in the IBS Program and an IMSD (Initiative for Maximizing Student Development) Scholar.

In addition, Chris also was chosen as a Neuroscience Scholar by the Society for Neuroscience in 2018. Chris currently is serving as the Programming Committee Co-Chair for the 2019 NEURAL (National Enhancement of Underrepresented Academic Leaders) Conference.



Ewing Wins Perry J. Gehring Award from SOT

Laura Ewing (mentor, Dr. Igor Koturbash) received the Perry J. Gehring Award for scientific excellence by a graduate student in risk assessment from the Society of Toxicology in 2018. Ewing’s abstract “Dose-response effects of dietary methionine intake on radiation-induced toxicity: An experimental and computational study,” proposed that a methionine (MET) supplemented diet MSD) would improve the response to total body irradiation (TBI); however, the results showed the opposite effect.

The \$1,500 Perry J. Gehring Award is given annually and is made possible by the Perry J. Gehring Risk Assessment Student Award Fund of the SOT endowment. Dr. Gehring was known for his contributions to biological modeling, scientific evidence-based risk assessment, and as a builder of scientific organizations. He served as SOT President from 1980-1981.



PETERSON LAB RECEIVES NATIONAL RECOGNITION

Dr. Eric Peterson, graduate student, Chuck Hay (*pictured right*) and the Peterson laboratory received national attention at the 2017 AAPS Annual Meeting in San Diego. AAPS issued a press release on their presentation titled “Novel gene therapy to treat methamphetamine abuse”, which highlights their work. The press release also resulted in a web interview by MIT Technology Review.

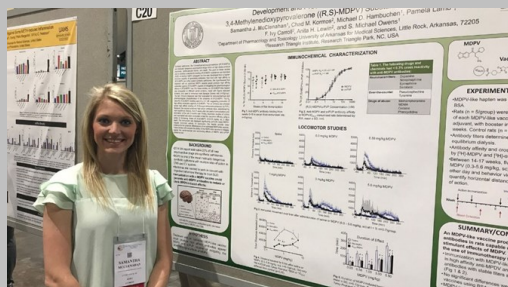


The study, “Novel anti-METH AAV-scFvs are capable of binding and sequestering methamphetamine and the active metabolite amphetamine in the blood” focuses on the development of a long-lasting gene therapy treatment, which makes the body generate antibodies against meth. These antibodies tightly bind to both meth and amphetamine, an active metabolite of meth, in the blood stream and prevent it from traveling to the brain.

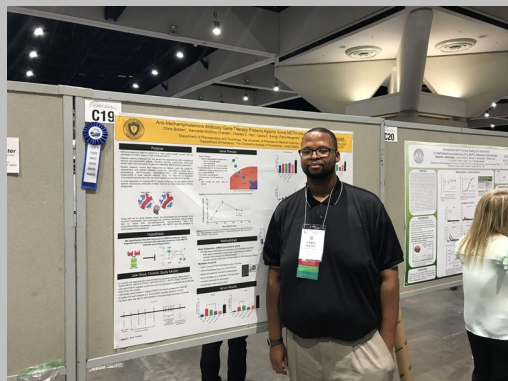
The Peterson team redesigned the therapy to deliver DNA to cells via a viral capsid, which then triggers the development of a protein to counter meth. Results achieved significant concentrations of protective antibodies in the bloodstream of mice (n=8). Meth and amphetamine concentrations were lower in brain tissue after administration of the therapy. In a separate behavioral-based study, the medication reduced or abolished meth-induced hyperactive movement in mice administered moderate doses of meth.

EB 2018 AWARDS

Congratulations to Samantha McClenahan and Chris Bolden for their awards at EB2018! Samantha won first place in the ASPET Poster Presentation in “Drug Discovery and Development.” Her poster and oral presentations titled “Development and preclinical testing of a vaccine for 3,4-Methylenedioxypyrovalerone ((R,S)-MDPV) substance use disorders” were chosen for a press release, and as a result, 7 articles were posted about it on various online news sites (ALN magazine, Labroots, Science Daily, etc).



Chris received third place in the Clinical Translational Pharmacology Poster Award competition of ASPET for his poster, “Anti-methamphetamine antibody gene therapy protects against some METH-induced inflammation”.



Samantha and Chris also were ASPET Mentoring Network Mentees. The mentoring network focuses on developing skills needed to succeed scientifically, professionally, psychologically, and socially, including discussions about experiences and pressures faced by groups that are underrepresented in the sciences.

SEAGER BRASWELL STUDENT RESEARCH SYMPOSIUM

The Department held the 20th annual Seager-Braswell Graduate Student Research Symposium in 2018. The symposium features research presentations by 3rd and 4th -year graduate students to an audience of faculty, trainees, and research staff. Dr. Philip Mayeux directed the event, and faculty members scored the students' talks.

First place in the Senior Competition was given to Chuck Hay (mentor, Dr. Peterson) for his talk, "Anti-methamphetamine antibody gene therapy ameliorates methamphetamine-induced locomotor effects in mice for 8 months after a single treatment". Michael Cozart (mentor, Dr. Fang Zheng) was runner-up for his presentation, "Elucidating the involvement of endothelial TRPC3 channels in neurovascular coupling during status epilepticus".



Seager-Braswell awardees (left to right): Dr. Philip Mayeux (symposium director), Samantha McClenahan, Brittney Garner, Michael Cozart, and Chuck Hay.

Brittney Garner (co-mentors, Drs. Mu and Rusch) was awarded first place in the Junior Competition for "ATP-sensitive potassium channel openers inhibit the rhythmic contractions of rat mesenteric lymph vessels and attenuate lymph flow". Samantha McClenahan (mentor, Dr. Owens) received second place for her talk "Development and preclinical testing of a vaccine for 3,4-methylenedioxypyrovalerone ((R,S)-MDPV) substance use disorders".

2018 STUDENT RESEARCH DAY

The department was well represented at the 2018 UAMS Student Research Day. Chris Bolden (mentor, Dr. Peterson) and Samantha McClenahan (mentor, Dr. Owens) tied for first place in the Graduate School "Poster Sessions" and first place "Overall". Bolden's poster was titled "Anti-methamphetamine antibody gene therapy protects against some METH-induced inflammation". McClenahan's poster presentation was "Development and preclinical testing of a vaccine for 3,4-Methylenedioxypyrovalerone ((R,S)-MDPV) use disorders". She also won the graduate school semi-finals and was second in the "3 Minute Thesis" category for "From prevention to treatment: Vaccines for substance use disorders".



Bill Hyatt (mentor, Dr. Fantegrossi) took second place in the Professional Student category for "Chronic administration of the synthetic cathinone 3,4-methylenedioxypyrovalerone (MDPV) enhances impulsive choice in rats".

The annual Student Research Day provides graduate students, postdocs, and medical house staff/fellows an opportunity to present their research to peers and faculty as well as learn about potential areas of collaboration at UAMS.

FUTURE PHARMACOLOGY STUDENTS



Alumni, Clark Sims and his wife welcomed Jack Bennett Sims, born August 2018

Alumni, Sujay Kharade and Nisha Nanaware-Kharade welcomed Sunisha, born September 2018.



Graduate student, Michael Cozart (left) has two arrivals! Ezekiel Horace was born September 2017. Brynn Alexandra was born October 2018.

Alumni, Neil Detweiler and Rachel Versluis have a new son, Anders (right), born March 2018. He joins big brothers, Owen and Emrys.



Dr. Wessinger has two new grandsons, Jake and Niko (Nikolas), pictured with his older grandson, Noah



Scarlett Jean Colley granddaughter of Dr. Rusch, born June 2018



Justice Ross Gilbert, grandson of Mary Ortiz born December 2018

ALUMNI and OTHER FRIENDS

Bill Allaben (NCTR) received the FDA's Lifetime Scientific Achievement Award for his lasting contributions to the advancement of regulatory science. He is principal and managing consultant for Toxicology Advisors, LLC.

Alex Alund (PhD, Ronis) is laboratory safety and building coordinator at the Arkansas Department of Health.

Rais Ansari (Research Assistant, Gandy) is an associate professor in the College of Pharmacy at Nova Southeastern University in Fort Lauderdale, FL.

Rhonda Anthony (Administration) is a grants specialist and executive assistant to Dr. Mark Smeltzer in the Department of Microbiology and Immunology at UAMS.

Will Atchley (PhD, Owens) is a pulmonary and critical care fellow at University of North Carolina Health Care.

January Baumgardner (PhD, Ronis) is a lecturer at Ouachita Technical College in Malvern.

Ronnie Jo Bever, Jr. (PhD, Howard) is a toxicologist at US EPA in Washington DC.

Venkata Bhogaraju (PhD, Crow) is a pharmacy manager at Walmart Pharmacy in Moses Lake, Washington.

John Bowyer (NCTR) will retire from the Division of Neurotoxicology at NCTR in October.

Kelly Byrnes-Blake (PhD, Owens) has a pharmacokinetic business, Northwest PK Solutions. She stays busy with her children (and her husband's fishing business).

Angela Burke (PhD, Hinson) was promoted to medical research scientist/toxicologist with NASMA. This promotion allows her to be remote so she is moving home to Arkansas in 2019 with her three-year-old daughter Savannah.

Yingnie Che (Research Assistant, Owens) is a research assistant in the Donald W. Reynolds Institute on Aging at UAMS.

Dian Cao (PhD, Kennedy) is a staff cardiologist and assistant professor of Internal Medicine, Cardiology Division, at UT Southwestern Medical Center.

Louis Chang (Faculty) is retired and serves as visiting staff to help National Health Research Institutes and the Taiwan government on various issues.

Parimal Chowdhury (Adjunct) received a Lifetime Achievement Award from the International Society for the Prevention of Tobacco Induced Diseases (ISPTID).

Krishna Chimalakonda (PhD, Moran) is a scientist in the Division of Drug Safety Research (DDSR), Center for Drug Evaluation Research (CDER), US FDA.

Danielle Cruthirds (PhD, Macmillan-Crow) is an associate professor in the Department of Pharmaceutical Sciences at McWhorter School of Pharmacy, Samford University.

Brian Cummings (Postdoc, Schnellman) is professor and director of the Interdisciplinary Toxicology Program at the University of Georgia.

Helen Cunny (PhD, Slikker) still is working for the NIEHS in Research Triangle Park, NC as a project officer in the area of reproductive and developmental toxicology.

Jaclyn Daniels (PhD, Wessinger) is a postdoctoral fellow at NCTR.

ALUMNI and OTHER FRIENDS

Greg Davis (Technician, Wessinger) is a registered nurse at UAMS.

Neil Detweiler (PhD, Rusch) is an assistant professor of biology at Goshen College. He and his wife **Rachel Versluis** (Research Technician, Rusch) welcomed a new son, Anders.

Linval DePass (PhD, Morris) received an award by the Society of Toxicology to travel to Cuba as an International Toxicology Scholar in 2019 to give lectures on toxicology and safety pharmacology at a conference in Havana. She also received a similar award from the SOT to travel to Jamaica to lecture at the University of the West Indies in 2011.

Rob Dorman (PhD, Brock) is a general surgeon at Mercy Hospital in Rogers.

Malvin Driver is chief of Retina Service, South Texas Veteran's Healthcare System in San Antonio, TX. He is teaching ophthalmology to residents from UTSA.

Sherry Ferguson (Adjunct) was selected as the permanent director of the Division of Neurotoxicology at NCTR.

Max Ford (PhD, Prather) is a postdoctoral fellow at NCTR.

Lirit Franks (PhD, Prather) is a stay at home mom and enjoying time with her children.

Gloria Gabriel (Administration) is a confectionary artist at Gigi's Cake Boutique.

Brenda Gannon (PhD, Fantegrossi) is the laboratory director at Steep Hill Arkansas and an adjunct faculty member in the Department of Pharmacology and Toxicology at UAMS.

Linta Garcia (Administration) is director, clinical operations and development at Teclison USA Limited in Jersey City, New Jersey.

Hollye Garner (PhD, Wessinger) was promoted to regional director, East, Complement Medical Science Liaisons, Alexion Medical Affairs.

Yun Ge (PhD, Light) works at the FDA/CDRH/OIVD as a scientific writer.

Karen Gilmore-Thomas (Staff, MacMillan) has a 4-year-old granddaughter and a new grandson.

Angela (Disch) Gray (PhD, Ali) is a clinical business solutions analyst with Mercy Health Systems in Fort Smith.

Michael Hambuchen (PhD, Owens) is an assistant professor of pharmaceutical science and research at Marshall University School of Pharmacy in West Virginia.

Jay Harriman (PhD, Schnellman) was promoted to head of Drug Safety at Boehringer Ingelheim Animal Health. His daughter, Alicia, who is a junior in high school participated in the YoungDogs program at University of Georgia in the lab of Brian Cummings.

Stephanie Hastings (Technician, Stimers) is a nurse anesthesiologist at Great Rivers Medical Center in West Burlington, IA.

Howard Hendrickson (Postdoc, Owens) was awarded tenure in the Department of Pharmaceutical Sciences at UAMS.

Dinesh Hinenallur (PhD, Rusch) is a laboratory animal veterinarian at the Amgen in Thousand Oaks, CA.

ALUMNI and OTHER FRIENDS

Jack Hinson (Faculty) is enjoying retirement and spending time at the beach in Gulf Shores. He recently caught a 27 lb, 3 ft black drum fish in the surf using shrimp as bait! See photo to the right!

Hunter Holthoff (PhD, Mayeux) is a resident in the UAMS Department of Internal Medicine.

Alissa Huberty (Research Technician, Palade) is a physician assistant at UAMS. She and her husband are proud parents of a new daughter.

Tom Hudzik is a Volweiler research fellow with Abbott/AbbVie, which is an emeritus, director-level position.

Dae Song Jang (PhD, Basnakian) is a postdoctoral fellow at the University of Florida.

Scott Jarmer (MS, Harbison) is a pathologist in Wichita, KS.

Biny Joseph (PhD, Rusch) is a grant program manager in Neuro-oncology Research, a department of the University of Texas MD Anderson Cancer Center.

Sujay Kharade (PhD, Rusch) is a research fellow in the Anesthesiology Research Division at Vanderbilt University Medical Center. He and his wife, **Nisha Nanaware-Kharade** (PhD, Peterson) are the proud parents of a baby girl, Sunisha. Nisha is a pharmacokineticist, Clinical Pharmacology Division, Pharmaceutical Product Development, LLC.

Anthony Kiorpes (NCTR) is “semi-retired”, but lecturing at the University of Minnesota, and serving as associate editor for the journal *Toxicology and Industrial Health*.

Charlotte Lemmonds (PhD, Wenger) is associate director of toxicology at Bayer HealthCare in Memphis.

Mark Levi (Postdoc, Crow) is a senior consultant with PAREXEL International.

Ben Lieblong (PhD, Rusch) is a clinical trial coordinator in the Department of Pathology at UAMS working on a Phase 2 trial of a therapeutic HPV vaccine.

John Lipscomb (PhD, Slikker) is a toxicologist and risk assessor at EPA in Cincinnati, Ohio.

Xiuli Liu (PhD, Mayeux) is a GI pathologist, full professor of Pathology and director of GI and Liver Pathology at the University of Florida in Gainesville.

Jessica Macchi (Administration) is a Research Administrator in the Office of Sponsored Programs Administrative Network at UAMS.

John Marecki (faculty) is an Instructor in the Department of Biochemistry and Molecular Biology at UAMS.

Beth Maris (PhD, Kennedy) teaches AP Chemistry at Little Rock Central High School.

Hillary Hanvey Mayberry (Research Technician, Rhee) graduated from UAMS' physician assistant program in 2018 and is working at UAMS in plastic and reconstructive surgery.

Diane McKinstry (Administration) is program coordinator for the INBRE program at UAMS.

Celia McCaslin (Administration) is Program Coordinator for the Anatomical Gift Program at UAMS.



ALUMNI and OTHER FRIENDS

Donald McMillan (Past Chair) continues in retirement at University House, a retirement community associated with the University of Washington. He has been active having given more than a half dozen talks on various aspects of pharmacology. He and Jerry are taking a class to improve his Spanish language skills.

Alessandra Milesi-Hale (PhD, Owens) is a child neurologist at Miami Children's Hospital.

Tanecia Mitchell (PhD, MacMillan-Crow) is assistant professor in the Department of Urology at University of Alabama at Birmingham. She was awarded a 5-year NIH K01 to study the role of immune cells in kidney stone disease.

Chris Moore (PhD, Rhee) is an FDA Commissioner's fellow at NCTR.

Shankar Munasamy (PhD, MacMillan-Crow) is an assistant professor at Qatar University.

Meagan Myers (PhD, Heflich) reports a new addition to her family, Sloane Winter Myers.

Paul Nony (PhD, Schnellmann) is a partner at the Center for Toxicology and Environmental Health, LLC.

Andrew Norwood (PhD, Fantegrossi) is an associate attorney at Denton & Zachary, PLLC in Little Rock.

James Oldham (PhD, Cave) is retired and babysitting seven grandchildren.

Mary Ortiz (Administration) is an IRB review analyst at Washington University in St Louis.

Edith Parker (Administration) is an executive assistant in the Department of Physiology and Biophysics at UAMS. Her event planning service, Divine Elegance, LLC is going well and has a website, www.deleganceevents.com.

Naeem Patil (PhD, Mayeux/MacMillan-Crow) is a research assistant professor at Vanderbilt University Medical School.

Elina Pathak (PhD, Mayeux) is a research scientist at Reliance Life Sciences in Mumbai.

Asif Pathan (PhD, Rusch) is a postdoctoral fellow at the University of Louisville.

Merle Paule (NCTR) retired from the National Center for Toxicological Research in 2018.

Aleksandra Pesic (Research Associate, Rusch) is in cancer research at Toronto General/Princess Margaret Hospital.

David Plowchalk (PhD, Mattison) is director of clinical pharmacology at Pfizer in Connecticut.

Tonya Rafferty (Research Assistant, Palade) is a research assistant in the UAMS Department of Neurobiology and Developmental Sciences.

Maheswari Rajasekaran (PhD, Prather) returned to her native India following graduation.

Ron Reed (Research Technician, Crow) still is showing horses during 12 months of the year and giving riding lessons.

Emily Reichard (PhD, Peterson) is pursuing her pharmacy degree at UAMS.

Kerrey Roberto (Research Technician, Palade) is IACUC Administrator at UAMS.

ALUMNI and OTHER FRIENDS

Martin Ronis (Faculty) is Professor of Pharmacology and Therapeutics in the College of Medicine at Louisiana State University.

Daniella Ruedi-Bettschen (Postdoc, Owens) is an instructor in neurobiology and behavior research at the University of Mississippi Medical Center.

Joan Runnels (Administration) moved to Rockwall TX in July 2018 to be closer to family. She is enjoying her grandchildren and her new shelter dog, Dodger.

Jennifer Gibson Schnellmann (PhD, Schnellmann) is an associate professor of pharmacology at University of Arizona.

Bernard Schwetz (Former Director, NCTR) is living in Taiwan and working as an English editor for an academic health center.

Kathryn Seely (PhD, Prather; postdoc, Mayeux) was promoted to section director at the Arkansas Department of Health in Little Rock.

John Seng (PhD, Gandy/Leakey) is an assistant professor on the research path at UAMS and BARBA program manager.

Jennifer Shoemaker (PhD, Prather) is owner and a science writer with Flourish Medical Writing based in Nashville.

Clark Sims (PhD, Mayeux) accepted a position as a senior research associate at Arkansas Children's Nutrition Center. He and his wife welcomed a baby boy, Jack Bennett Sims.

Rohit Singal (PhD, Ronis) is a research scientist with Sanofi U.S. Inc., in Framingham, MA.

Sharda Singh (Faculty) is an assistant professor in the Department of Internal Medicine at Texas Tech University in Lubbock, TX.

Swapnil Sonkusare (PhD, Rusch) is a tenure-track assistant professor at the University of Virginia in Charlottesville.

Mary Alice Smith (PhD, Harbison) retired from University of Georgia, but remains active. In 2018, she served as Chair and then Past Chair of the Scientific Liaison Coalition. She and her husband live in Gainesville, GA where they enjoy water activities, and their border collie.

Anup Srivastava (PhD, Rusch) is working for the FDA as a toxicology reviewer in the Office of New Drugs (OND), Center for Drug Evaluation Research (CDER).

Misty Thompson (PhD, Crow) is working for the UTHSC Institutional Review Board as a compliance advisor.

Manish Tiwari (PhD, Mayeux) is a physician/researcher at University of Nebraska at Omaha.

Linda Traylor (PhD, Mayeux) is senior director of Scientific Affairs at The Binding Site, Inc.

Barbara Vogt (PhD, Mattison) has a consulting practice, Tox Focus LLC, and is an adjunct assistant professor in the UAMS Fay W. Boozman College of Public Health, and guest lecturer.

Zhen Wang (PhD, Mayeux) is assistant professor at University of Mississippi Medical Center.

Galen Wenger (Faculty) and his wife, Carolyn recently downsized to a smaller home closer to 2 of their 4 grandchildren. Dr. Wenger continues to actively work on retirement issues at UAMS with other Emeritus faculty. He also finds time for tennis, singing, and fishing!

ALUMNI and OTHER FRIENDS

Dave Wessinger (Faculty) is enjoying his retirement to the fullest with lots of time for fishing, camping in his airstream, and fun with his three grandsons.

Rick Wiese (PhD, Kadlubar) participated in a 3- month resident think tank held at Merck Corporate HQ in Darmstadt, Germany. While there, he visited France, Austria, Singapore and Australia and attended Oktoberfest in Munich.

John Wedig is still shooting competitively action pistol, 3 gun and skeet. He is fishing for rainbow trout in the Ozarks at Rockbridge, MO.

Sarah White (PhD, Owens) is teaching chemistry at Arkansas Technical College at Ozark.

Linnzi Wright (PhD, Paule) works at the US Army Edgewood Chemical Biological Center, Toxicology and Obscurants Division, Aberdeen Proving Ground, MD.

Liping Wu (PhD, Mayeux) is associate manager of regulatory affairs at Johnson & Johnson in Singapore.

Xinwen (James) Yu (PhD, Kennedy) continues his quest of personalized medicine for cancer therapy while working at Dako, an Agilent company, in CA.

Piotr and Ludwika Zimniak (Faculty) are enjoying life in California as much as ever.

Mark Zorbas (PhD, Owens) works on innovative medicines in chronic pain and oncology.

Do you have contact information for these alumni?

Adams, Robert J.
Adatsi, Felix K.
Barfield, Lisa
Baron, Scott
Blackall, Doug
Stromberg Butler, Mary A.
Chapman, John R.
Chen, Genfu
Chou, Hsien-Chang
Clevenger, Martha A.
Cohen, Harold G.
Cole, Troy W.
Fadhel, Nawzad
Frame, Lynn T.
Garr, Kermit A.
Griffin, Joseph
Hall, Benjamin H.
Hart, Ronald
Henry, Berch E.
Huey, Sally
Jerram, David C.
Juan, David
Le, Hoa

Li, Erdong
Li, Jin
Lu, Song
Marvin, Peter M.
Matthews, Anthony M.
Medlock, Kevin L.
Merritt, James M.
Mitchell, Benjamin E.
Montague, D. C.
Morrison, David R.
Murphy, Bruce E.
Partridge, Jennings E.
Rastogi, Santosh
Richtarik, Alfred A.
Rock, Tara
Schiefer, Mark A.
Schmid, Jack R.
Selders, Marie
Si, Ying
Stone, William T.
Watts, Dennis R.
Williams, Richard F.
Williamson, Anthony P.

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Philip Mayeux, PhD, Professor and Vice Chair

Alexei Basnakian, MD, PhD, Professor

Lisa Brents, PhD, Assistant Professor

William Fantegrossi, PhD, Associate Professor

Paul Gottschall, PhD, Professor

Nancy Gray, PhD, Professor

Shuk-Mei Ho, Professor & Vice Chancellor for Research

Mahmoud Kiaei, Associate Professor

Lee Ann MacMillan-Crow, PhD, Professor

Jeffery Moran, PhD, Assistant Professor

Shengyu Mu, PhD, Assistant Professor

Michael Owens, PhD, Professor

Philip Palade, PhD, Professor

Nirmala Parajuli, PhD, Assistant Professor

Eric Peterson, PhD, Associate Professor

Paul Prather, PhD, Professor

Sung Rhee, PhD, Associate Professor

Fang Zheng, PhD, Associate Professor

Departmental Staff

Fred Goad, Departmental Administrator

Sharon Farris, Procurement Specialist

Pam Kahler, Executive Assistant

Emeritus Faculty

Donald McMillan, PhD, Former Chair and Professor Emeritus

Jack Hinson, PhD, Distinguished Professor Emeritus

John Crow, PhD, Professor Emeritus

Joseph Stimers, PhD, Professor Emeritus

Galen Wenger, PhD, Professor Emeritus

W. David Wessinger, PhD, Professor Emeritus

Piotr Zimniak, PhD, Professor Emeritus