

UAMS Department of Pharmacology & Toxicology

Alumni Newsletter, January 2023



Dear Alumni and Other Friends,

It's been an interesting two years since you received our last Alumni Newsletter in January 2021. Most notably, the COVID-19 pandemic has subsided to an endemic level and masking is no longer required in the UAMS research buildings. It's great to have in-person classes, meetings, and seminars again, while still leveraging virtual technology to expand our reach.

Our department has grown in size and funding, particularly in the areas of cancer, toxicology and cardiovascular. We are a young department with assistant professors accounting for 8 of 19 full-time faculty positions. Our graduate students and post-doctoral fellows add creativity to the laboratories and vibrancy to the department. We celebrate diversity and have recruited talent from across the world. We also are proud of our alumni including faculty, staff and trainees. You set a high bar for us to continuously strive to raise higher.

Wishing you and your families a happy and healthy 2023!

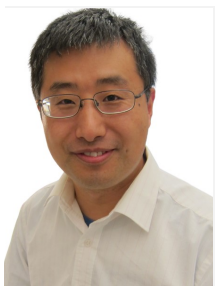
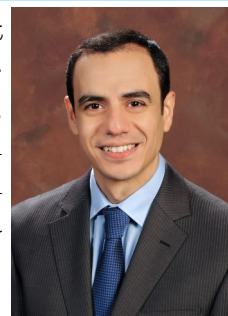
*Nancy J. Rusch, Ph.D., Distinguished Professor and Chair
Faculty, Staff, & Trainees, Dept. of Pharmacology & Toxicology*

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New Faculty

Dr. Abdelrahman Fouda joined the department as a tenure-track assistant professor in July 2021 from the Medical College of Georgia (MCG), Augusta University. His postdoctoral training at MCG focused on the retinal circulation, mechanisms of retinal protection, and the study of arginase to ameliorate retinal neurodegeneration. He has published 39 original manuscripts, was awarded an American Heart Association postdoctoral fellowship, and is the recipient of a highly competitive K99/R00 Award from the National Eye Institute of the NIH. He also is a licensed pharmacist.



Dr. Huiliang Zhang joined the department as a tenure-track assistant professor in July 2021 from the Department of Laboratory Medicine and Pathology at the University of Washington - Seattle, where he was awarded an American Heart Association (AHA) Career Development Award. He has 30 publications focused on ischemia-reperfusion injury in the heart, and the role of reactive oxygen species, mitochondrial dysfunction, and lipid overload. His unique techniques include in-vivo imaging of mitochondria and cardiac stem cell therapies.

Dr. Brenda Gannon joined the department as an instructor in 2021. She also is the Regulatory Affairs Manager in the Office of Research Regulatory Affairs. Before joining UAMS, Dr. Gannon was a postdoctoral fellow at UT Health San Antonio and worked as an assistant professor in the Departments of Pharmaceutical Sciences and Pharmacology, Toxicology, and Neuroscience at Louisiana State University Health Center. Her last position was laboratory director at Steep Hill Arkansas, a private analytical testing facility in Arkansas.



Dr. Andrew Morris joined UAMS in 2021 as a tenured professor. He is a research investigator at the Central Arkansas Veteran's Healthcare System (CAVHS). Prior to his arrival, he was the Ashwin Annand Endowed Professor of Cardiovascular Research at the University of Kentucky where he directed an institutional mass spectrometry facility and was a research investigator at the Lexington Veterans Affairs Medical Center. Dr. Morris studies the role of lipid signaling in human diseases and develops mass spectrometry methods for lipid analysis and biomarkers. He has authored more than 220 publications and was invested as the Mehta/Stebbins Chair in Cardiovascular Research in 2022.

Dr. Rushita Bagchi joined the department in 2021 as an assistant professor working with professor Andrew Morris and the late dean of the College of Medicine, Dr. Susan Smyth. Prior to her arrival, Dr. Bagchi was a postdoctoral fellow at the University of Colorado. Her research expertise includes cardiovascular and metabolic diseases, particularly metabolomics and gene regulation. Dr. Bagchi received her PhD in cardiovascular pathophysiology from University of Manitoba.



Dr. Zufeng Ding joined the department as an assistant professor in 2022. He earned a PhD in biomedical engineering from Beihang University (Beijing) and joined the UAMS Department of Internal Medicine in 2011, rising from the position of postdoctoral fellow to assistant professor. He has published 62 papers on topics related to mechanisms of atherosclerosis, cardiac ischemia and vascular disease. Dr. Ding was awarded a new investigator NIH R01 grant and a R21 grant in 2022.



Dr. KyoungHyun Kim joined the department in 2022 as an assistant professor. He received his PhD in molecular toxicology from Texas A&M University and then served as an assistant professor in Environmental and Public Health Sciences at University of Cincinnati. Dr. Kim's research focuses on the molecular basis of nuclear receptors and non-coding RNAs in toxicant-induced tissue injuries and cancers, with an emphasis on obtaining scientific knowledge that can improve preventive and therapeutic strategies.

Promotion & Tenure

Professor and chair Nancy Rusch was awarded the esteemed rank of Distinguished Professor by the UA System Board of Trustees in 2021. Distinguished Professor is a special distinction reserved for faculty members who are recognized nationally or internationally as intellectual leaders in their academic disciplines with exceptional accomplishments in research, teaching, scholarly publications and other work. Promotion to the rank requires endorsement from college and UA campus leadership as well as the Board of Trustees.



Assistant professor Shengyu Mu was promoted to associate professor in 2022. Dr. Mu joined the department in 2013 as an assistant professor on the non-tenure track and was appointed to the tenure track in 2017. He is the recipient of a NIH R01 grant focused on high blood pressure as an immune disorder and is a recognized expert in the area of salt-sensitive hypertension. He has published his findings in high-impact journals including *Nature Communications* and *Circulation Research*. His graduate students have been the recipients of national awards and predoctoral fellowship funding.

Professor Alexei Basnakian was promoted in 2021 from GS-14 to GS-15 at the CAVHS. He joined the VA in 1996 and has been funded as a VA investigator since 2005. GS-15 is equivalent to the academic position of professor and it is the top GS position representing only 4.2% of all federal employees. Only four other UAMS researchers holding this position, including professor Shuk-Mei Ho and professor Andrew Morris in the department. Dr. Basnakian also received a prestigious VA Research Career Scientist (RCS) Award in 2022.

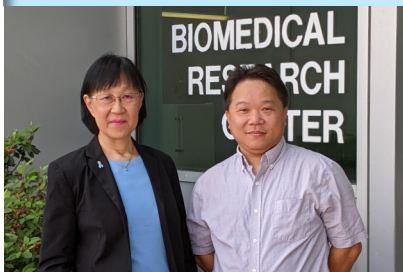


Associate professor Ricky Leung was awarded tenure in 2022. Dr. Leung joined the department in 2019 from University of Cincinnati (UC) as an associate professor. He began his faculty career in 2005 as an assistant professor in the UC Division of Environmental Genetics and Molecular Toxicology, Department of Environmental Health. His research focus is understanding gene dysregulation in hormone-related cancers, including epigenetic gene regulation, and using next-generation sequencing to understand transgenerational inheritance.

Associate professor Eric Peterson was named Executive Vice President of BioVentures in 2022. This new role leverages Dr. Peterson's expertise in medication development, an area in which he was awarded NIH funding to explore improvement of anti-methamphetamine antibodies. His new position also draws on his knowledge of intellectual property, which he will use to help UAMS researchers capitalize on their discoveries to launch new biomedical products to improve health care. Dr. Peterson has served on the UAMS Patent and Copyright Committee since 2014 and served as chair since 2021.



Faculty Awards



Vice Chancellor of Research and Innovation and professor Shuk-Mei Ho and **associate professor Ricky Leung** received three major awards in 2022! A five-year, \$2.54 million NIH R01 grant will use the latest genetic sequencing technology to test the effects of arsenic exposure in mice during early life and adolescence. They will determine whether exposure to inorganic arsenic during these “windows of susceptibility” leads to infertility traits that may

last for generations. Also on this team is assistant professor Neville Tam.

Dr. Ho also is a co-principal investigator on a multi-institutional four-year \$6 million NSF grant that plans to develop a new class of chemical sensors to detect toxic chemicals including heavy metals and pesticides in humans and the environment. Dr. Leung co-leads the human sensor development and testing project.

The final award is a Department of Defense grant on which Dr. Ho is co-principal investigator with Dr. Kalpana Palada (UAMS) and Dr. Leung is co-investigator. This four-year \$2.9 million dollar study tests for organic pollutants in blood and heavy metals in urine, which researchers hypothesize persist after exposure to burn pits.

In addition to the above collaborative awards, **professor Shuk-Mei Ho** received a prestigious BLRD Research Career Scientist Award in 2022. This five-year award funded by the Office of Research and Development, Veterans Administration, recognizes non-clinician scientists who have made significant research contributions to the health and wellbeing of Veterans. Dr. Ho received the award as an internationally recognized expert on hormonal carcinogenesis and endocrine disruption of bodily functions.



Professor Andrew Morris received a large grant from the Department of Defense and the Department of Veterans Affairs Health Outcomes Military Exposures Service (HOME) in 2022. The studies will focus on health risk effects of exposure to per and polyfluorinated substances, which are persistent environmental chemicals widely used in military installations for firefighting. Dr Morris and his group will measure circulating levels of these chemicals in subjects enrolled in large longitudinal cohort studies managed by the Departments of Defense and Veterans Affairs. The multi-year award includes startup funds to

develop a national shared health exposure analysis core facility at the Central Arkansas Veterans Healthcare System.

Assistant professor Zufeng Ding received an New Investigator R01 award and a R21 Award in 2022 from the NIH National Heart Lung and Blood Institute. Another R01 grant submission was positively scored after study section review. Studies in the newly funded R01 focus on hemodynamics (steady versus turbulent blood flow) as a source of endothelial mechanotransduction and dysfunction, and the contribution of these events to localization of atherosclerosis. **Associate professor Shengyu Mu** is a co-investigator on the award and participated in the study design.



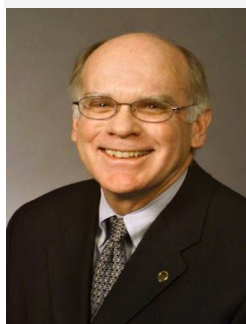
Dr. Ding's R21 award focuses on the mechanisms by which aging initiates upregulation of the enzyme, proprotein convertase subtilisin/kexin type 9 (PCSK9), which Dr. Ding hypothesizes promotes the development of endothelial cell senescence. The proposal considers anti-PCSK9 strategies as novel therapies to mitigate aging-related cardiovascular diseases.

Faculty Awards



Assistant professor Nirmala Parajuli received a five-year, \$2.46M new investigator R01 grant in 2021 from the NIH National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The goal of this project is to identify cold storage-mediated pathways leading to proteasome dysfunction and injury after kidney transplantation. The announcement of her large award appeared in the digital daily news in Arkansas Business and also was featured in Arkansas Money and Politics, Arkansas Soul and Talk Business and Politics publications.

A study led by UAMS startup biopharmaceutical company InterveXion Therapeutics LLC was funded in 2021 by a three-year, \$13.8 million grant from the NIH National Institute on Drug Abuse (NIDA). The drug, IXT-m200, will be tested in a phase 2 clinical trial as a monoclonal antibody treatment for methamphetamine use disorder and overdose. It received the U.S. Food and Drug Administration (FDA) Fast Track Designation in 2016 for this purpose. InterveXion was established through BioVentures LLC by a UAMS research team that includes **professor emeritus Michael Owens**. **Brooks Gentry**, professor of anesthesiology, is the chief medical officer of InterveXion. Dr. Gentry and **Misty Stevens**, who serves as Chief Operating Officer of InterveXion, are co-principal investigators of the NIDA grant.



Distinguished professor emeritus Jack Hinson was part of a collaborative team that received a 3-year, \$3.2 million Small Business Technology Transfer (STTR) grant from the NIH. The team includes Dr. Hinson, Translational Research Institute director and pediatrics professor Laura James, and Dr. Dean Roberts. The new funding in 2022 will pay for the final phase of study before seeking FDA approval of the first rapid diagnostic test for acetaminophen toxicity. This award will clear a major hurdle for this new diagnostic test on its long road to the marketplace from UAMS.

Professor Hui-Ming Chang is leading a NIH-funded phase one clinical trial as the first step in a long-term plan to evaluate the efficacy of a new medication to protect the heart during doxorubicin chemotherapy. The “Phoenix Trial” is being conducted at the Winthrop P. Rockefeller Cancer Institute’s Phase 1 Cancer Clinical Trial Unit. The trial evaluates the drug, dexrazoxane (DEX), which has been on the market since 2007. Dr. Chang believes that when DEX is given in advance of treatment, it will completely protect the heart without interfering with doxorubicin’s efficacy as an anti-cancer agent. During her phase one trial, she hopes to learn the most effective dose and timing for administering DEX prior to doxorubicin. The trial will recruit 30 healthy women ages 18 to 65.



Professor Alexei Basnakian and UAMS collaborators, assistant professor Bolni Marius Nagalo (PI) and professor Martin Cannon, received a Team Science Pilot Award in 2022 from the Winthrop P. Rockefeller Cancer Institute. The study will evaluate the ability of a live attenuated viral vaccine to synergize with immune response inhibitors to provide durable anti-tumor immunity in a mouse model of hepatocellular carcinoma, which is the most common liver cancer and a leading cause of cancer-related deaths in the U.S.

Faculty Awards



Assistant professor Lisa Brents received a one-year Barton Pilot Award of \$25,000 from the UAMS College of Medicine in 2022 to explore the contribution of the active metabolite norbuprenorphine to buprenorphine-associated neonatal opioid withdrawal syndrome (NOWS). Dr. Brents' team will use a rat model established by her laboratory to determine the effects of combining the opioid buprenorphine and its active metabolite norbuprenorphine during gestation on NOWS.

Assistant professor Michael Berquist was a 2021 recipient of a one-year UAMS Barton Pilot Grant Award of \$25,000. His project focuses on the effects of early life adversity, exercise, and social stability on ethanol use in rats. The studies are intended to model the "real life" situation in which children often are exposed to multiple challenges early in life that may affect later behaviors. The long-term goal is to identify preventive strategies to deter the development of alcohol use disorders.



Assistant professor Abdelrahman Fouda was funded by a one-year 2022 Hornick Award from the UAMS College of Medicine to test the hypothesis that neutralization or deletion of the membrane glycoprotein, signal regulatory protein α (SIRP α), on myeloid cells will enhance clearance of apoptotic cells and improve stroke outcomes. Studies will employ SIRP α floxed mice provided by Dr. Hisashi Umemori at Harvard Medical School. **Associate professor Ricky Leung** serves as a collaborator.

Assistant professor Rushita Bagchi was awarded a 1-year, \$10,000 Brunson Endowment Grant in 2022 from the UAMS College of Medicine for a project focused on mapping the interactome of a lysine defatty acylase in the diabetic myocardium using engineered human stem cell-derived cardiomyocytes and epitope-tag and/or BioID protein tools. Dr. Bagchi also received a UAMS Sturgis Endowment Grant for a project that uses an omics approach to identify HDAC-mediated mechanisms of diabetic cardiomyopathy.



Assistant professor Shengyu Mu received a 1-year Brunson Endowment Grant of \$10,000 in 2021 to fund a study on mechanisms of lymphatic contractile dysfunction in hypertension. Dr. Mu and his team that includes assistant professor Amanda Stolarz (UAMS College of Pharmacy) will explore the effects of high blood pressure on lymphatic contraction, proposing to identify a new link between hypertension, disrupted lymphatic function, and loss of lymph flow that may contribute to hypertension co-morbidities.

Also receiving a 1-year, \$10,000 Brunson Endowment Grant in 2021 was **assistant professor Huilang Zhang**. His proposal seeks to establish a novel human induced pluripotent stem cell (hiPSC) differentiated cardiomyocyte senescence model by optimizing exposure to the chemotherapeutic agent, doxorubicin. He will use the model to explore mechanisms of excessive mitochondrial proton leak as a cause of cardiac aging. The model also would enable high-throughput screening of drugs with anti-aging properties.



Faculty Awards



Associate professor Ricky Leung received a 1-year \$25,000 UAMS Development Enhancement Awards for Proposals (DEAP Award). He plans to collect preliminary data for a R01 grant to explore the effect of in utero arsenic exposure on sperm function and to demonstrate ability to detect modified bases in small RNAs using a new Nanopore sequencing protocol. The proposal addresses the emerging concern that paternal exposure to toxicants, including arsenic, may compromise sperm quality and male fertility in offspring.



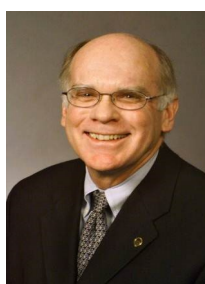
Professors Sung Rhee and Alexei Basnakian received grants in 2021 from the College of Medicine's "1-2-3 Go" program that provided \$75,000 in seed funding for interdisciplinary faculty teams to jumpstart new projects. Dr. Rhee was project lead for a team seeking interventions to improve arterial bleeding cessation. Dr. Basnakian's team led by professor and chair Teresita Bellido (UAMS Physiology and Cell Biology) focused on using Pyk2 inhibitors to prevent bone fragility.

Faculty & Staff Recognition



The department's faculty were recognized in a study by Stanford University that listed >50 current and past UAMS faculty in the top 2% of most influential researchers. Faculty honored were **Vice Chancellor for Research and Innovation Shuk-Mei Ho** and **professor Andrew Morris**. The study was based on an analysis of Scopus, the largest database of peer-reviewed research literature. It used a combination of citation metrics to rate a researcher's influence in their subfield over the course of

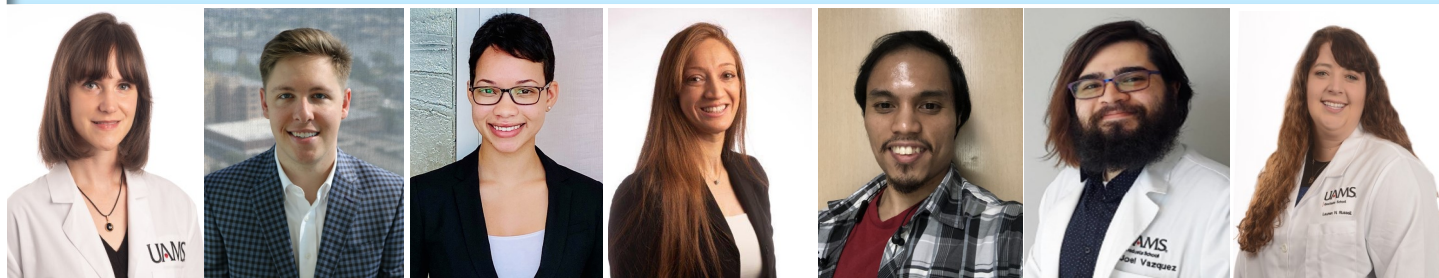
their career through 2019 – the most recently available data. Citation metrics included the h-index, a measure of a researcher's productivity and impact; and hm-index, which reflects research co-authorships to establish a composite score. Also honored were (pictured left to right) **distinguished emeritus professor Jack Hinson** and **professors emeritus Philip Mayeux and John Crow**.



Program manager Pam Kahler received the 2021 Staff Excellence in Research Award at the College of Medicine Dean's Honor Day. Pam joined the department in 2011 as executive assistant for professor and chair Nancy Rusch. Earlier, she worked for 14 years in the UAMS Department of Pediatrics in community programs. Pam serves as program manager for two NIH grants, which include the Systems Pharmacology and Toxicology (SPaT) T32 Training Program and the Health Sciences Innovation and Entrepreneurship Postdoctoral TL1

Training program. She was co-nominated by Dr. Rusch and professors Alexei Basnakian, Paul Prather, and Kevin Sexton (BioVentures). Pictured at the ceremony are business manager Fred Goad, Dr. Prather, Dr. Rusch, Ms. Kahler and Dr. Basnakian.

Our 2021-2022 Graduates



Julia Tobacyk (mentor: Dr. MacMillan-Crow) defended her dissertation, “Developing a novel assay for measuring OMA1 activity and investigating the role of OMA1 in renal cold storage”, on May 17, 2021. She was a former scholar of the Systems Pharmacology and Toxicology (SPaT) T32 Training Program. Dr. Tobacyk is a scholar in the CTSA-funded Health Sciences Innovation and Entrepreneurship Postdoctoral Training Program at UAMS and is mentored by assistant professor Lisa Brents.

David Henry (mentor: Dr. Rhee) defended his dissertation, “ β_1 -Adrenergic receptor-mediated dilation of cerebral arteries during beta blocker therapy, hypertension, and ischemic stroke”, on June 2, 2021. Dr. Henry received his undergraduate degree from Davidson College and his Master’s in Public Health from Tulane University School of Public Health and Tropical Medicine. He is in the MD/PhD program at UAMS and returned to medical school to complete his MD degree.

Catheryn Wilson (co-mentors: Drs. Prather & Fantegrossi) defended her dissertation, “Cannabimimetic and convulsant effects of synthetic cannabinoid receptor agonists, AB-PINACA, 5F-AB-PINACA, and 5F-ADB-PINACA in mice”, on April 23, 2021. She completed her undergraduate degree at the University of North Carolina (UNC) at Pembroke. Dr. Wilson has returned to North Carolina where she is a postdoctoral fellow at UNC-Chapel Hill.

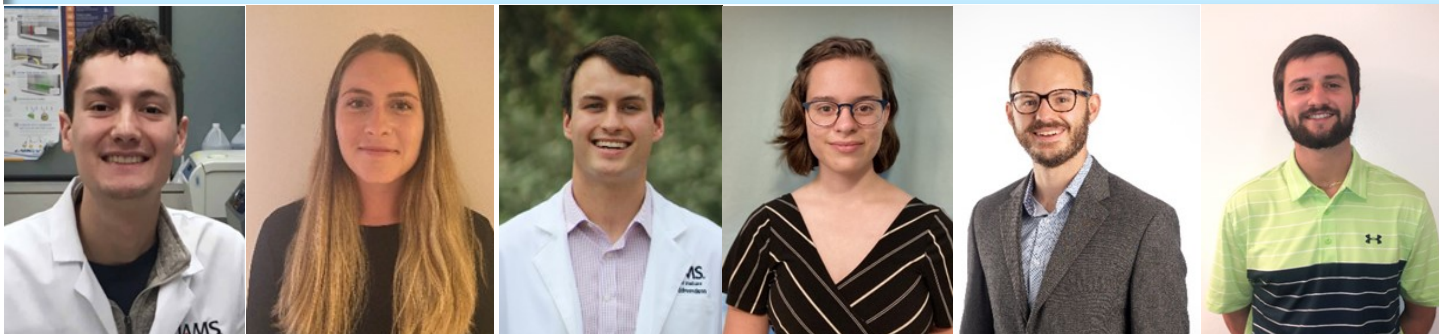
Amal Shoeib (mentor: Dr. Prather) defended her dissertation, “Characterization of non-canonical cannabinoid receptors in cancer cells: Implications for drug development”, on October 1, 2021. Dr. Shoeib received her undergraduate degree in pharmacy and pharmaceutical sciences from Misr International University in Egypt in 2008 and a master’s degree from Mansoura University, also in Egypt, in 2016. She is a postdoctoral fellow at Columbia University in New York.

Christian Cabanlong (mentor: Dr. Prather) defended his dissertation, “Atypical pharmacodynamics characteristics of novel synthetic cannabinoid receptor agonists (SCRAs) 4F-MDMB-BINACA and 5F-MDMA-PINACA: Insight into toxicity”, on February 18, 2022. Dr. Cabanlong received his undergraduate degree in biology from the University of New Mexico (UNM) in 2014 and returned to UNM for his postdoctoral fellowship.

Joel Vazquez (mentor: Dr. McGill) defended his dissertation, “Biomarkers of drug-induced liver injury: Discovery, evaluation and mechanistic insights”, on May 20, 2022. Dr. Vazquez graduated magna cum laude with a BS in toxicology from St. John’s University, New York. He is a regulatory toxicologist at L’Oreal Cosmetics in New Jersey.

Lauren Russell (mentor: Dr. Fantegrossi) defended her dissertation, “*In vivo* structure-activity relationships of substituted amphetamines and substituted cathinones”, on June 28, 2022. Dr. Russell is a scholar in the CTSA-funded Health Sciences Innovation and Entrepreneurship Postdoctoral Training Program at UAMS under the mentorship of Dr. Alison Oliveto.

Systems Pharmacology & Toxicology (SPaT) T32



Six graduate students were appointed in 2021 and 2022 to the Systems Pharmacology and Toxicology (SPaT) T32 Training Program directed by professor Paul Prather. The 2021 trainees include (left to right): Luke Childress (mentor, Dr. Ryan Porter), Lucy Fry (mentor, Dr. Tiffany Weinkopf), and Jacob Edmondson (mentor, Dr. Alan Tackett). The 2022 trainees include: Katherine “Katie” Deck (mentor, Dr. Shengyu Mu), Charles “Matt” Burnham (co-mentors, Drs. Alexei Basnakian & Intawat Nookaew), and Randall Rainwater (mentor, Dr. Marie Burdine). Luke, Lucy, Katie and Matt are recipients of two-year appointments funded by the NIGMS. Jacob and Randall received a one-year campus-funded match appointment as MD/PhD students.

The SPaT Annual Symposia in August 2021 and 2022 featured presentations by SPaT trainees and Student Choice Speakers. The 2021 SPaT Symposium featured Dr. Christopher McCurdy, who is a professor of medicinal chemistry at the University of Florida (UF) College of Pharmacy and also directs the UF Translational Drug Development Core. His presentation was titled “Can a controversial dietary supplement end the opioid crisis?”.

Dr. David Mattson, professor and chair of physiology at the Medical College of Georgia at Augusta University, was featured at the 2022 SPaT Symposium. Dr. Mattson is a Georgia Research Alliance Eminent Scholar in Hypertension. His presentation was titled “The gut-immune-kidney axis: Influence of dietary protein in salt-sensitive hypertension.”

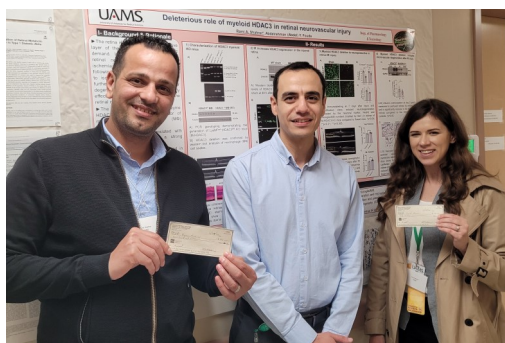
Trainee Awards & Recognition



Graduate student and former SPaT Scholar, Lance Benson (mentor, Dr. Shengyu Mu), won multiple awards in 2022. He was selected as a finalist for the American Physiology Society (APS) 2022 Predoctoral Excellence in Renal Research Award and won first place for his talk during the (APS) annual meeting at Experimental Biology. He also was selected as a finalist for the AHA Hypertension Early Career Oral Award and gave an oral presentation at the AHA Scientific Sessions meeting in San Diego. His abstract was selected in the top 10% of abstracts by trainees. Lance also received a Kyoto Young Investigator Bronze Award to present his research at the International Society of Hypertension in Kyoto, Japan in 2022.

At UAMS, Lance competed in the Three Minute Thesis finals on Student Research Day sponsored by the UAMS Graduate School and won third place and received the People’s Choice Award. Finally, he received word in December that he was the recipient of a one-year AHA Predoctoral Fellowship Award titled “Inappropriate activation of CD8+ T cells contributes to the pathogenesis of hypertension” (co-mentors: Drs. Shengyu Mu & Nancy Rusch). His stipend will be paid by the AHA award during his final year of graduate school.

Trainee Awards & Recognition



Two trainees from the laboratory of assistant professor Abdelrahman Fouda were winners of the poster presentation contest at the South Central Chapter for Society of Toxicology conference held in Fall 2022 at UAMS. Postdoctoral fellow Rami Shahrour won first place for his poster presentation on “Deleterious role of myeloid HDAC3 in retinal neurovascular injury” and graduate student Carol Morris won third place for her poster presentation on “Investigation of the retinal metabolic function in Type 1 diabetes Akita mice”.

Graduate student Katie McGraw won second place for her poster presentation at the 2022 South Central Chapter for Society of Toxicology conference titled “Characterization of a novel complement 5 knockout model in the rat.” Her presentation highlighted the development in her mentor’s laboratory (mentor, Dr. Nirmala Parajuli) of a novel knockout rat that will be used to gain insight into the injurious signaling pathways that are activated when kidneys are stored in cold solution before transplantation.

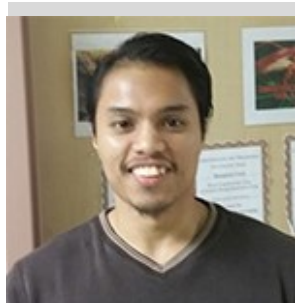


Katie’s abstract “Methamphetamine-induced proteomic changes within the neuroinflammatory TLR4 pathway persist after long-term self-administration in rats” was selected for a presentation at the 2022 Experimental Biology meeting. Katie presented this as part of the Induction of Early Onset Cardiovascular Disease by Methamphetamine symposium.



Postdoctoral fellow Julia Tobacyk and assistant professor Lisa Brents were awarded a 2022 UAMS Provost’s Innovator Award for their project, “Development of a fetal protective agent against prenatal opioid use disorder”. The goal is to determine if a novel buprenorphine analogue can prevent or reduce respiratory depression and neonatal opioid withdrawal syndrome caused by the opioid fentanyl when fentanyl is taken during pregnancy. Dr. Brents is the PI on this award and Dr. Tobacyk is co-investigator.

Dr. Tobacyk and her team, which included postdoctoral fellow Megan Reed (Biochemistry and Molecular Biology) and two graduate students from UA Fayetteville, won second place in the People’s Choice Award at a Seed Funding Pitch Competition at the Sam M. Walton College of Business at UA Fayetteville. The team won \$1000 for their project, “A diagnostic tool for treating glioblastoma using precision medicine”. The competition was part of the New Venture Development course that Dr. Tobacyk attends as a scholar in the CTSA-funded Health Sciences Innovation and Entrepreneurship Postdoctoral Training Program.



Congratulations to graduate student Christian Cabanlong on his trainee abstract, which was chosen as a 2021 Program Committee Blue Ribbon Pick by the ASPET Program Committee. Christian’s poster, “Major metabolites of the synthetic cannabinoid 5F-ADB retain high affinity and full efficacy at CB1 receptors; potential mechanism contributing to enhanced toxicity?” was displayed during the virtual ASPET Annual Meeting at Experimental Biology 2021, April 27-30.

Trainee Publications

We are very proud of our trainees who have an impressive list of publications for 2021-2022.

Benson, L.N., Liu, Y., Wang, X., Xiong, Y., Rhee, S.W., Guo, Y., **Deck, K.S.**, **Mora, C.J.**, Li, Lin-Xi, Huang, L., Andrews, J.t., Qin, Z., Hoover, R.S., Ko, B., Williams, R.M., Heller, D.A., Jaimes, E.A., Mu, S. (2022) The IFN γ -PDL1 pathway enhances CD8T-DCT interaction to promote hypertension. *Circ Res*. 130(10): 1550-1564

Benson, L.N., Liu, Y., **Deck, K.**, **Mora, C.**, Mu, S. (2022) IFN- γ contributes to the immune mechanisms of hypertension. *Kidney* 360. 3(12): 2164-2173. PMCID: PMC9802558

Cabanlong, C.V., **Russell, L.N.**, Fantegrossi, W.E., Prather, P.L. (2022) Metabolites of synthetic cannabinoid 5F-MDMB-PINACA retain affinity, act as high efficacy agonists and exhibit atypical pharmacodynamic properties at CB1 receptors. *Toxicol Sci*. 187(1): 175-185. PMCID: PMC9216042

Clemens, M.M., Kennon-McGill, S., **Vazquez, J.H.**, Stephens, O.W., Peterson, E.A., Johann, D.J., Allard, F.D., Yee, E.U., McCullough, S.S., James, L.P., Finck, B.N., McGill, M. (2021) Exogenous phosphatidic acid reduces acetaminophen-induced liver injury in mice by activating hepatic interleukin-6 signaling through inter-organ crosstalk. *Acta Pharm Sin B*. (11(12); 3836-3846.

Deck, K.S., Mu, S. (2022) uEVs: A potential tool for examining renal epithelial cells. *Kidney* 360. 3(5): 796-798. PMCID: PMC9438409

Fulo, H.F., **Shoeib, A.**, **Cabanlong, C.V.**, Williams, A.H., Zhan, C.G., Prather, P.L., Dudley, G.B. (2021) Synthesis, molecular pharmacology, and structure-activity relationships of 3-(indanoyl)indoles as selective cannabinoid type 2 receptor antagonists. *J Med Chem*. 64(9): 6381-6396. PMCID: PMC8683641

Garner, B.R., Stolarz, A.J., Stuckey, D., Sarimollaoglu, M., Liu, Y., **Palade, P.T.**, Rusch, N.J., Mu, S. (2021) K_{ATP} channel openers inhibit lymphatic contractions and lymph flow as a possible mechanism of peripheral edema. *J Pharmacol Exp Ther*. 376(1): 40-50. PMID: 33100270; PMCID: PMC7745085

McGill, M.R., James, L.P., McCullough, S.S., Moran, J.H., Mathews, S.E., Peterson, E.C., Fleming, D.P., Tripod, M.E., **Vazquez, J.H.**, Kennon-McGill, S., Spencer, H.J., Dranoff, J.A. (2021) Short-term safety of repeated acetaminophen use in patients with compensated cirrhosis. *Hepatology Commun*. Doi: 10.1002/hep4.1810. PMID: 34558847

Moore, C.L., **Henry, D.S.**, **McClenahan, S.J.**, Ball, K.K., Rusch, N.J., Rhee, S.W. (2021) Metoprolol impairs β 1-adrenergic receptor-mediated vasodilation in rat cerebral arteries: Implications for β -blocker therapy. *J Pharmacol Exp Ther*. 376(1): 127-135. PMID: 33100271; PMCID: PMC7788352

Russell, L.N., **Hyatt, W.S.**, Gannon, B.M., Simecka, C.M., Randolph, M., Fantegrossi, W.E. (2021) Effects of laboratory housing conditions on core temperature and locomotor activity in mice. *J. Am Assoc Lab Anim Sci*. 60(3): 272-280. PMID: 33888181; PMCID: PMC8145121

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Trainee Publications

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Farewells & Retirements



Research associate Mike West (seated in center) retired on July 31, 2021. Mike began his career at UAMS in 1982 and worked in the laboratories of Drs. Michael Owens and Brooks Gentry since 2007. Mike stated "I have enjoyed almost every minute and I look forward to retirement to spend more time with family, travel, and fish with my grandson. Warp Speed Ahead. LLAP (live long and prosper)." Mike's extensive Star Trek collection has been featured in Arkansas publications.

Dr. Sung Rhee left UAMS in July 2022 to begin a new position as professor in the Department of Medical Education at the new Kaiser Permanente Bernard J. Tyson School of Medicine in Pasadena, California. The new position will allow Dr Rhee a full-time opportunity to pursue his teaching passion. Originally trained in theoretical physics, Dr. Rhee led a cardiovascular laboratory in the department since 2006, entering as assistant professor and ultimately achieving the rank of professor in 2021. He was the recipient of NIH and American Heart Association (AHA) funding for his research, which focused on abnormalities of cerebral blood flow during hypertension and stroke. Dr. Rhee also co-directed the cardiovascular module for the medical students at UAMS. He was recognized with many teaching awards, including the Faculty Award for Educational Research at the 2022 College of Medicine Dean's Honor Day. He received the Sophomore Golden Apple award for seven consecutive years and was the recipient of the 2021 Chancellor's Teaching Award for teaching excellence which was established in 2004 to recognize outstanding teaching.



In Memoriam



Alumnus Dr. Carl Cerniglia died on April 9, 2021. He was an adjunct professor in the department and trained a number of graduate students at NCTR where he served as the Director of the Division of Microbiology. He was a member of the Senior Biomedical Research Service for the US Food and Drug Administration (FDA), a job he deeply loved, leading a group of dedicated, world-renown professionals. He received the FDA Commissioner's Award, the FDA Lifetime Achievement Award, and the U.S. DHHS Outstanding Leader Award. Dr. Cerniglia served as an advisor and expert reviewer at the World Health Organization located in Geneva, Switzerland where he was awarded the Silver Medal for outstanding scientific contributions.

Dean Wright, who worked with emeritus professors Galen Wenger, Dave Wesinger and other behavioral pharmacology researchers, passed away on August 7, 2021 following an extended battle with cancer. Born in Ontario, Canada, Dean received his BS in biology at McMaster University. After moving to Arkansas, Dean started a career at UAMS that spanned 35 years. He leveraged knowledge gained in the department to start a career in UAMS IT where he continued to support the research community. He was also a pastor from 1984 to 1994 at Oak Grove Church of Christ and officiated services for people and families he knew, served on mission trips to Haiti, volunteered as a Pulaski County police chaplain, and held babies at Arkansas Children's Hospital. Dean is survived by his wife, three children and 11 grandchildren.



In Memoriam



Dr. Ludwika (Wisla) Zimniak died in September 2021. She was a research associate professor in the department and served as a research partner for many years with her husband, professor emeritus Piotr Zimniak. The Zimniaks joined the department in 2002, and for the next ten years, their highly funded VA and NIH –supported research program focused on the physiological and toxicological role of lipid peroxidation in obesity and aging. The Zimniaks retired to California in 2012 to be closer to family members.

Professor Nancy Gray died following a short illness on June 2, 2021. She was the Director of BioVentures, LLC and a faculty member in the department, where she contributed importantly to directing the CTSA-funded Health Sciences Innovation and Entrepreneurship (HSIE) Postdoctoral Training Program. Dr. Gray received her undergraduate degree in chemistry from Bucknell University and her doctorate in medicinal chemistry from the University of Illinois. She worked >30 years in biomedical industries including medicinal chemistry research, management of pharmaceutical R&D, and business operations. Her executive roles included jobs at Monsanto Corporation, Vaxinnate Corporation, Elan Corporation, and later at the Southern Research Institute in Alabama. Dr. Gray's research on CNS diseases resulted in three products accepted for clinical development. She also was instrumental in developing two marketed second generation antihistamines, Allegra and Xyzal. She was the inventor on 31 issued U.S. patents and the author of 23 publications.



Executive vice chancellor and dean of the UAMS College of Medicine, Susan Smyth, passed away unexpectedly on December 31, 2022 after a battle with cancer. She was a nationally respected cardiologist and translational researcher who joined UAMS in 2021 from the University of Kentucky where she was chief of the Division of Cardiovascular Medicine and director of the Gill Heart and Vascular Institute. She also served as a cardiologist and funded investigator for the VA Health Care System. Dr. Smyth was a member of the American Society for Clinical Investigation, past president of the Association of University Cardiologists and served on the CTSA Steering Committee

for the National Center for Advancing Translational Science. She authored more than 200 publications, contributed to a dozen textbooks, and co-directed a research lab in the department with her husband, professor Andrew Morris. Her funded research focused on the interplay between inflammation and thrombosis in vascular biology. In November, she was invested at UAMS in the Arkansas Medical Society Distinguished Dean's Chair.



Alumni & Other Friends



Dr. Jay Gandy recently celebrated his retirement with a celebration on December 15, 2022. Attending are (left to right): Galen Wenger, Jack Hinson, Jay Gandy, Glenn Millner, Philip Mayeux, Michael Owens, and Eric Peterson.

Bill Allaben (NCTR) is a principal and managing toxicologist with Toxicology Advisors, LLC and a Board Certified Toxicologist for the Academy of Toxicological Sciences.

Alex Alund (PhD, Ronis) is an ORISE postdoctoral fellow at Pfizer in Connecticut.

Rais Ansari (Research Assistant, Gandy) continues as 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 UAMS Department of Microbiology and Immunology.

Will Atchley (PhD, Owens) is an assistant professor in the UAMS Department of Internal Medicine (Pulmonary and Critical Care).

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

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

Chris Bolden (PhD, Peterson) is a Trauma T32 postdoctoral fellow at University of Texas Health Science Center in Houston.

John Bowyer retired from the Division of Neurotoxicology at NCTR in October 2019.

Angela Burke (PhD, Hinson) left NASMA and joined Stryker Orthopedics in May 2021 and Abbott Medical in November 2021 as a toxicologist writing toxicological risk assessments. Her daughter Savannah is now six.

Alumni & Other Friends

John Budroe (PhD, Casciano) is chief of the Air Toxicology and Risk Assessment Section (since 2014) in the Air and Site Assessment and Climate Indicators Branch, office of Environmental Health Hazard Assessment at the California Environmental Protection Agency.

Kelly Byrnes-Blake (PhD, Owens) is still working as a consultant with Northwest PK Solutions and the business is growing consistently. Both children are in high school and doing well.

Dian Cao (PhD) is associate professor/staff cardiologist at UT Southwestern Medical Center.

Louis Chang (Faculty) retired from the National Health Research Institutes in Taiwan and is an advisor to the School of Medicine and consultant to the President at National Cheng Kung University in Taiwan. He was bestowed with the title of Chair Professor of Molecular Medicine at NCKU and Chair Professor of Environmental Health and Toxicology in various medical universities in Taiwan. Due to COVID-19, he returned to Georgia but runs back and forth between US and Taiwan. He is still an avid art collector.

Yingne Che (Research Assistant, Owens) is a research associate in the UAMS Donald W. Reynolds Institute on Aging and was recently voted MVP at UAMS in November 2022.

Krishna Chimalakonda (PhD, Moran) is associate director of regulatory affairs for Amneal Pharmaceuticals in New Jersey.

Parimal Chowdhury (Adjunct) is professor emeritus in the Department of Physiology and Cell Biology at UAMS since July 2019. He is still active academically having published a paper in 2021 and remaining loyal to all his scientific societies.

John Crow (Faculty) is enjoying his retirement in Little Rock. He recently took up metal detecting and is working on launching his second career as a science writer for professional and lay-science publications.

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

Brian Cummings (Postdoc, Schnellman) is dean of the Eugene College of Pharmacy and Health Sciences at Wayne State University in Detroit.

Helen Cunny (PhD, Slikker) is still working for the NIEHS in Research Triangle Park, NC.

Jaclyn Daniels (PhD, Wessinger) is a biomedical researcher in Miami/Ft Lauderdale, Florida.

Greg Davis (Technician, Wessinger) graduated from the UAMS College of Nursing with his MS in nursing with a specialty in family practice.

Linval DePass (PhD, Morris) was invited to participate in a mentoring program for minority students (ToxSMDT) interested in pursuing a career in toxicology.

Neil Detweiler (PhD, Rusch) is an assistant professor of biology and director of pre-health programs at Goshen College. His wife **Rachel Versluis** (Research Technician, Rusch) is in nursing school.

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.

Laura Ewing (PhD, Peterson) is a staff scientist at the National Center for Toxicological Research (NCTR).

Alumni & Other Friends

Sherry Ferguson (Adjunct) has retired from the Division of Neurotoxicology at NCTR.

Terry Fletcher (Research Associate, Rusch) is making the most of his retirement. His newest hobby is caring for and socializing foster puppies and kittens for local rescues.

Max Ford (PhD, Prather) joined the Center for Toxicology and Environmental Health, LLC as a toxicologist in August 2020.

Lirit Franks (PhD, Prather) has relocated to Salt Lake City, Utah where she is a freelance science writer. She had a new daughter, Ira, born in September 2020.

Gloria Gabriel (Administration) runs Gigi's Cake Boutique in Sherwood, AR.

Brenda Gannon (PhD, Fantegrossi) is an instructor in the department of Pharmacology and Toxicology, and the regulatory affairs manager in the Office of Regulatory Affairs at UAMS.

Brittney Garner (PhD, Rusch/Mu) is a regulatory scientist at Cook Medical. Brittney and her partner Alicia were married in September 2021.

Hollye Garner (PhD, Wessinger) is senior director, rare disease medical science liaisons for Amgen Medical Affairs.

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

Karen Gilmore-Thomas has a granddaughter and grandson she enjoys.

Jaspreet Gujral (PhD, Jaeschke) is senior manager of Regulatory and Scientific Affairs at Tate and Lyle.

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) is the director of Drug Safety at Boehringer Ingelheim Animal Health and has been in the industry for twenty years now. Both of his children are in college and his youngest daughter is considering a graduate degree in Pharm/Tox or a related field.

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

Charles Hay (PhD, Peterson) is a postdoctoral fellow at the Medical College of Wisconsin.

Howard Hendrickson (Postdoc, Owens) is chair of the Department of Pharmaceutical, Social and Administrative Sciences at Samford University McWhorter School of Pharmacy.

Jack Hinson (Professor Emeritus) remains active in the department and with Acetaminophen Toxicity Diagnostics, LLC.

Hunter Holthoff (PhD, Mayeux) is an assistant professor in the UAMS Department of Internal Medicine, Division of Nephrology.

Alissa Huberty (Research Technician, Palade) is a physician assistant at UAMS.

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

Bill Hyatt (PhD, Fantegrossi) is a resident at the Psychiatric Research Institute at UAMS.

Dae Song Jang (PhD, Basnakian) is a postdoctoral fellow at NIH/NIDDK in Bethesda, MD.

Alumni & Other Friends

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

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

Sujay Kharade (PhD, Rusch) is senior director of pharmacology at Grifols. His wife, **Nisha Nanaware-Kharade** (PhD, Peterson), is principal scientist at DMPK at Sanofi. Their children are now 4 and 1.5 years old.

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 is principal toxicologist in the product safety group with Amway R&D Global Regulatory Affairs.

Mark Levi (Postdoc, Crow) is a pharmacologist at the Center for Biologics at the FDA.

Ben Lieblong (PhD, Rusch) joined Adaptive Biotechnologies in June as Field Medical Operations Manager where he supports two teams of medical science liaisons. He relocated to New Orleans and thankfully sustained no damage from Hurricane Ida.

John Lipscomb (PhD, Slikker) is Senior Toxicologist at the Center for Toxicology and Environmental Health, LLC

Xiuli Liu (PhD, Mayeux) is a professor of pathology and director of GI and liver pathology at Washington University School of Medicine in St. Louis.

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

Beth Maris teaches AP Chemistry at Little Rock Central High School.

Bill Massey (PhD) is now Chief Development Officer for Ninnion Therapeutics developing treatments for traumatic brain injury and stroke.

Hillary Hanvey Mayberry (Staff, Rhee) is now an assistant professor and director of clinical education in the physician assistant program at UAMS.

Philip Mayeux (Professor Emeritus) retired in 2020 and started the Arkansas Art Scene Blog. So far he has interviewed over 130 Arkansas artists. arkansasartscene.com

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

Samantha McClenahan (PhD, Owens) is a postdoctoral fellow at Vanderbilt University and received an F32 award. She and her husband and two older sons, Odin and Abel, welcomed Ezra Luke Harrell on November 15, 2021.

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

Donald McMillan (Past Chair) continues in retirement at University House, a retirement community associated with the University of Washington. He spends most of his time giving talks and writing a column that focuses on health science topics, politics, homelessness and similar issues. His son, David, is Chair of Pharmacology in charge of educational programs at Nebraska College of Medicine and daughter, Pamela, is a molecular biologist at Washington University Medical Center. He has three grandsons who are a physician, one studying for his PhD in atmospheric chemistry, and one in high school.

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

Alumni & Other Friends

Glenn Millner (PhD, Casciano/Harbison) is the Founder and Principal Toxicologist of Center for Toxicology and Environmental Health (CTEH,) LLC.

Tanecia Mitchell (PhD, MacMillan-Crow) is an assistant professor in the Department of Urology at University of Alabama at Birmingham.

Shankar Munasamy (PhD, MacMillan-Crow) is still with Drake University College of Pharmacy and Health Sciences where he recently received the 2022 Mentor of the Year award. He also received the 2022 Excellence in Teaching Award from the American Association of Colleges of Pharmacy (AACP) Biological Sciences Section.

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

Paul Nony (PhD, Schnellmann) has been promoted to Senior Vice President at the Center for Toxicology and Environmental Health, LLC. He reports directly to the COO of their parent company Montrose Environmental Group.

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

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

Mary Ortiz (Admin) has a new grandson born October 6, 2022. Trece Bishop Acklin joins big brother Justice.

Michael Owens (Professor Emeritus) has been enjoying his free time and some travel since he retired in 2019. He still serves as CSO of InterveXion Therapeutics, LLC.

Edith Parker (Admin) has taken a new position with Riceland Foods.

Asif Pathan (PhD, Rusch) is Associate Director of Clinical Operations at Rain Therapeutics.

Elina Pathak (PhD, Mayeux) is a research associate at Genome Institute of Singapore.

Naeem Patil (PhD, Mayeux/MacMillan-Crow) is the manager of medical writing at Vir Biotechnology, Inc.

Merle Paule retired from the National Center for Toxicological Research in 2018 and is now residing in Santa Rosa, California.

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

Tonya Rafferty (Research Assistant, Palade) is a research assistant in the UAMS Dept of Neurobiology and Developmental Sciences in the laboratory of Dr. Paul Drew.

Maheswari Rajasekaran (PhD, Prather) lives in India and is pursuing a career in medical writing.

Ron Reed (Research Technician, Crow) is still showing horses and giving riding lessons.

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

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

Michale Ruckle (Staff, Prather) is senior health scientist and epidemiology project manager at Center for Toxicology and Environmental Health, LLC.

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

Alumni & Other Friends

Jennifer Gibson Schnellmann (PhD, Schnellmann) teaches in the College of Medicine at the University of Arizona where her husband, **Rick Schnellmann**, is the dean of the College of Pharmacy. She also coordinates the first BS program in the College of Pharmacy and is finishing her 10th book this spring as well as editing a new neuropsychology text for Elsevier.

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 Director of the Arkansas Public Health Laboratory at the Arkansas Department of Health in Little Rock.

John Seng (PhD, Gandy/Leakey) is senior IRB administrator at UAMS.

Dinesh Hinenallur Shanthappa (PhD, Rusch) was recently promoted from senior principal scientist to associate research fellow at Pfizer in Boston, MA.

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

Stephen Shrum (PhD, MacMillan-Crow) is a postdoctoral fellow in pharmaceutical sciences at UAMS and a scholar in the NIH-funded Health Sciences Innovation and Entrepreneurship Postdoctoral Training Program.

Clark Sims (PhD, Mayeux) is assistant staff scientist at Arkansas Children's Nutrition Center at Arkansas Children's Hospital.

Rohit Singal (PhD, Ronis) is a director of global product development at Pfizer in Boston.

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

Mary Alice Smith (PhD, Harbison) retired in 2016 from the University of Georgia. She still serves on student committees, gives occasional lectures, serves on grant review panels and is a consultant to several government agencies.

Swapnil Sonkusare (PhD, Rusch) is a tenured associate professor at the University of Virginia (UVa) Charlottesville. He was recently awarded his fourth R01 to investigate the role of TRPV4 channel signaling in lung ischemia-reperfusion injury.

Anup Srivastava (PhD, Rusch) was promoted to senior pharmacologist in the Office of New Drugs, CDER, FDA. He also cleared the American Board of Toxicology certification exam and is now officially a diplomate of the American Board of Toxicology (DABT).

Chris Stewart (PhD, Slikker; Postdoc, Kennedy) is principal consultant with SGI Consulting.

Joe Stimers (Faculty) is enjoying his retirement.

Amanda Stolarz (PhD, Rusch) and **Daniel Fil** (Postdoc, Kiaei) were married in October 2022 at Mt Nebo State Park in Arkansas.

Christopher Teaf (PhD) is president and director of toxicology at Hazardous Substance and Waste Management Research in Tallahassee, FL.

Keshari Thakali (Postdoc, Rusch) is an assistant professor in the Department of Pediatrics, Developmental Nutrition at Arkansas Children's Hospital.

Misty Thompson (PhD, Crow) has joined the clinical research operations team for a medical device company specializing in neurological devices.

Alumni & Other Friends

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

Linda Traylor (PhD, Mayeux) is senior principal of medical affairs at IQVIA.

Shanthi Vadali (PhD, Post) is at St. Jude's Children's Research Hospital GMP manufacturing facility working on cellular and gene therapies. She was recently promoted to Lead Scientist for release testing.

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

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

John Wedig (Adjunct) is enjoying retirement with traveling, trout fishing and competitive shooting.

Galen Wenger (Professor Emeritus) remains active in the department helping out as needed despite having retired in 2014. He is an active member of the UAMS Emeritus Faculty Council.

Dave Wessinger (Faculty) is enjoying retirement camping in his two airstreams, and having fun with his three grandsons and his new granddaughter.

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

Rick Wiese (PhD, Kadlubar) was promoted in 2022 to Head of Singleplex and Special Protein Platforms R&D at MilliporeSigma.

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) is senior director of translational medicine at Qilu Pharmaceutical.

Piotr Zimniak (Professor Emeritus) continues his retirement in California.

Mark Zorbas (PhD, Owens) still is working at Pfizer as the global technology lead in regulatory submissions.



Faculty & Staff Roster

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Faculty

Nancy Rusch, PhD, Distinguished Professor and Department Chair

Paul Prather, PhD, Professor and Department Vice Chair

Alexei Basnakian, MD, PhD, Professor

Michael Berquist, PhD, Assistant Professor

Lisa Brents, PhD, Assistant Professor

Hui-Ming Chang, PhD, Professor

William Fantegrossi, PhD, Associate Professor

Abdelrahman Fouda, PhD, Assistant Professor

Shuk-Mei Ho, PhD, Professor

Mahmoud Kiaei, PhD, Associate Professor

KyoungHyun Kim, Assistant Professor

Ricky Leung, PhD, Associate Professor

Lee Ann MacMillan-Crow, PhD, Professor

Jeffery Moran, PhD, Assistant Professor

Andrew Morris, PhD, Professor

Shengyu Mu, MD, PhD, Associate Professor

Philip Palade, PhD, Professor

Nirmala Parajuli, PhD, Assistant Professor

Eric Peterson, PhD, Associate Professor

Neville Tam, PhD, Assistant Professor

Huilang Zhang, PhD, Assistant Professor

Fang Zheng, PhD, Associate Professor

Departmental Staff

Fred Goad, Business Administrator

Sharon Farris, Procurement Specialist

Pam Kahler, Executive Assistant

Cheryl Shelton, Education Specialist

Emeritus Faculty

Donald McMillan, PhD, Former Chair and Professor Emeritus

Jack Hinson, PhD, Distinguished Professor Emeritus

Paul Gottschall, PhD, Professor Emeritus

Philip Mayeux, PhD, Professor Emeritus

S. Michael Owens, PhD, Professor Emeritus

Galen Wenger, PhD, Professor Emeritus

W. David Wessinger, PhD, Professor Emeritus