

# UAMS Department of Pharmacology & Toxicology Alumni Newsletter, December 2012



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## *Dear Alumni and Friends,*

Happy Holidays from the Department of Pharmacology & Toxicology at UAMS!

In Little Rock, our Department continues to weather the NIH budget constraints. We have a mix of new and veteran members in the Department. The group photo (above) was taken at our Department Fall Reception in September to welcome new graduate students and staff. A similar department photo (back page) was featured in the Arkansas Democrat-Gazette to advertise UAMS as a great place to work!

Our graduate programs continue to be recognized at the national level. Several Ph.D. students won national competitions or earned coveted journal cover stories. Six students received their Ph.D. degrees in 2012, and two students were awarded predoctoral training grants from the American Heart Association. Three new students entered our training programs in August and they are off to a strong start! They are guided by our dedicated Graduate Education Committee composed of faculty members Philip Mayeux, Lee Ann MacMillan-Crow and Paul Gottschall.

We also acknowledge the retirement in November of Professor Piotr Zimniak and Associate Professor Ludwicka Zimniak. This strong husband-wife research team funded by the NIH and by the Veterans Administration has provided genetic and molecular expertise to UAMS colleagues for more than two decades. We have missed them after they moved to California to join family and spoil grandchildren! Assistant Professor Sharda Singh has assumed leadership of their laboratory supported by a talented team of research staff.

Very best wishes to you and your families as you enjoy the Holiday Season and ring in the New Year!

*Galen Wenger*, Department Vice-Chair & Alumni Chair

*Nancy Rusch*, Professor and Department Chair

## GRADUATE PROGRAMS

- Six students graduated with the Ph.D. degree in 2012. J. Hunter Holthoff (Dr. Mayeux) will finish the MD/PhD program. Sujay Kharade (Dr. Rusch) is a postdoctoral fellow at UAMS. Elina Pathak (Dr. Mayeux) is a research scientist at Reliance Life Sciences in Mumbai, India. Zheng Wang (Dr. Mayeux) is a postdoctoral fellow at the University of Mississippi. Matthew Howell (Dr. Gottschall) will start a postdoctoral position at Iowa State University and Krishna Chimalakonda (Dr. Moran) will be a postdoctoral fellow at the National Center for Toxicological Research (NCTR).
- Three new students started the Graduate Program in Fall 2012: Max Ford (Ouachita Baptist), Kevin Howk (UA-Fayetteville) and Clark Sims (Hendrix University).
- Pharmacology student Asif Pathan (Dr. Rusch) and Toxicology student Naeem Patil (Drs. MacMillan-Crow & Mayeux) received pre-doctoral training grants from the South Central Affiliate of the American Heart Association in July. Pathan received an award for his grant “Vascular TRPC3 Channels in Hypertension”. Patil’s grant was titled “Mitochondrial Oxidants and Mitochondrial Injury in Renal Microcirculatory Failure during Sepsis Induced Kidney Injury.”
- UAMS was granted a student chapter of the American Association of Pharmaceutical Scientists. Toxicology graduate student Nisha Nanaware (Dr. Peterson) is the founder and president of the student chapter advised by Dr. Peter Crooks, Chair of the Department of Pharmaceutical Sciences.
- J. Hunter Holthoff won first place and Asif Pathan was runner-up in the senior student competition at this year’s Seager-Braswell Symposium. The junior student competition winner was Naeem Patil and the runner up was Anup Srivastava (mentor: Nancy Rusch).

### Thakkar wins Innovation in Biotechnology Award

Shraddha Thakkar, graduate student in the UAMS/UALR Bioinformatics Program, was lead author of a paper titled “Design and In Vitro Testing of Structure-driven Mutations of an Anti-methamphetamine Therapeutic Single Chain Antibody with Subnanomolar Affinity”. The paper was selected by the American Association of Pharmaceutical Scientists for an Innovation in Biotechnology Award. Thakkar presented her research at the association’s May conference.

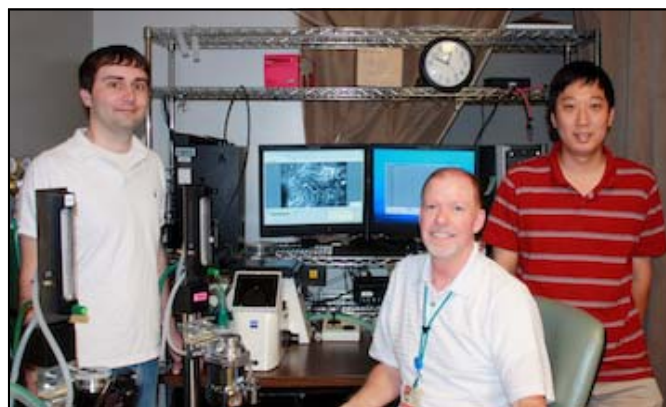
The project is a collaborative effort between faculty members Eric Peterson (Pharmacology & Toxicology), Kottayil Varughese (Physiology & Biophysics), and the UAMS/University of Arkansas in Little Rock graduate program in bioinformatics.



*Kottayil Varughese, Shraddha Thakkar, and Eric Peterson*

### Holthoff’s research featured in “Kidney International”

J. Hunter Holthoff, graduate of the Pharmacology Graduate Program, was the lead author of a publication featured on the cover of the February 2012 issue of *Kidney International*. The article titled “Resveratrol Improves Renal Microcirculation, Protects Tubular Epithelium, and Prolongs Survival in a Mouse Model of Sepsis-induced Acute Kidney Injury,” was co-authored by faculty member and mentor Philip Mayeux, Zhen Wang (recent graduate of the Pharmacology Graduate Program), Kathryn Seely (graduate of the Toxicology Graduate Program), and Neriman Gokden (Associate Professor of Pathology).



*Hunter Holthoff, Philip Mayeux, and Zhen Wang*

## FACULTY NEWS

### Medical School Curriculum Update

The 2012-2013 academic year has introduced significant changes in the College of Medicine curriculum for Medical Students. The first two years of the Medical School curriculum is transitioning from department-based lecture courses (ie, Medical Pharmacology, Medical Physiology) to a series of multi-disciplinary Team-Based Learning (TBL) segments focused on organ systems (ie, CNS, cardiovascular). New teaching sessions include TBL in which medical students choose and initiate treatments based on pathologies presented in the computerized human simulation laboratory. In parallel, new graduate coursework was introduced in our Pharmacology and Toxicology Graduate Programs under the direction of Professors Paul Gottschall and Lee Ann MacMillan-Crow, respectively.

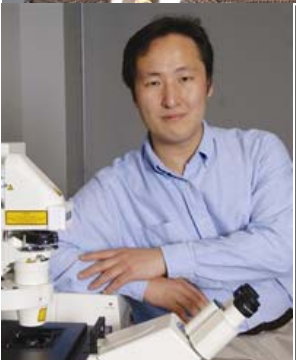
### Faculty promotions in 2012



**Professor Alexei Basnakian** was awarded the title of Research Career Scientist at the Little Rock VA Medical Center for a five-year period beginning October 2012. The RCS Award provides support for outstanding scientists who perform research at VA Medical Centers across the country. Applicants are judged on funding history, productivity, and impact on their research field. Basnakian's laboratory is funded by the NIH and the Veterans Administration to explore organ injury caused by endogenous cytotoxic DNA endonucleases (DNases). His research team also pursues translational research to define the role of carbamylated low-density lipoprotein (cLDL) in experimental and human atherosclerosis.



**W. David Wessinger** was promoted from the rank of Associate Professor to Professor of Pharmacology and Toxicology with tenure. Wessinger is the Director of the Interdisciplinary Biomedical Sciences (IBS) Graduate Program and the Director of the UAMS M.D./Ph.D. Program. He oversees the training of more than 80 students, including 33 IBS PhD students, 21 medical scientist (MD/PhD) students, and 14 Masters degree (MS) students, and others. He is a Co-investigator on NIH grants to which he contributes expertise in behavioral pharmacology.



**Sung Rhee** was promoted from the rank of Assistant Professor to Associate Professor of Pharmacology and Toxicology with tenure. Rhee was the recipient of a prestigious 4-year Scientist Development Grant (SDG) from the American Heart Association and currently is funded by a R01 grant from the NIH National Heart Lung and Blood Institute (NHLBI) to study abnormalities of vascular scaffolding proteins during hypertension. His research interests include using ion channel genes as therapeutic agents to normalize blood pressure and defining molecular mechanisms that regulate the trafficking and expression of ion channels in vascular muscle cells during hypertension.



As a valuable secondary faculty member, **W. Brooks Gentry** was promoted from the rank of Associate Professor to Professor of Pharmacology and Toxicology. Gentry's primary appointment is in the Department of Anesthesiology where he achieved the rank of Professor in 2006. Gentry is a popular lecturer in the Medical Pharmacology Course and also contributes to graduate education in the Department of Pharmacology and Toxicology. He has partnered with department faculty, most notably with Professor Mike Owens, to design monoclonal antibodies against drugs of abuse, test them in experimental animal models and ultimately bring them to clinical trials.

## Mayeux receives outstanding mentor award



Professor Philip Mayeux was selected as the Outstanding Mentor for 2012 by the UAMS Graduate School. He is the inaugural recipient of this award, and was nominated by his predoctoral students. Mayeux is the Director of Education for the Department of Pharmacology and Toxicology. He has mentored six graduate students and one postdoctoral fellow during the past ten years. Three of his recent trainees have won predoctoral training grants from the NIH or from the American Heart Association.

## Zimniaks retire from UAMS

In October, the Department of Pharmacology & Toxicology wished a fond farewell to Drs. Piotr and Ludwika Zimniak, who officially retired November 1, 2012. The Zimniaks joined the department in 2002 with Piotr as a Professor and Ludwika as a Research Associate Professor. During the past 10 years, their NIH-funded research focused on the physiological and toxicological role of lipid peroxidation in obesity and aging. Piotr also was the recipient of a VA Research Career Scientist Award. The Zimniaks retired to California to be closer to family. We miss them but wish them all the best!



## Remembering Dan Sheehan (1944-2012)

It is with sympathy that we report the death of Dan Sheehan on May 3, 2012. Dan received his undergraduate and Master's degrees from the University of South Florida in Tampa, and his PhD from the University of Tennessee at Oak Ridge. Dan retired as a career biochemist from the National Center for Toxicological Research (NCTR). For many years, he was an active adjunct faculty member in the Interdisciplinary Toxicology Graduate Program at UAMS.

## STAFF NEWS



Congratulations to research assistant Ronald Reed, whose Pinto gelding "Skippen In The Wind" was named Reserve World Champion in the barrel racing division at the Pinto World Championship Show in

Tulsa (OK) and placed 3<sup>rd</sup> in the pole bending competition. Ron's mare "My Diamond's Sizzle" placed 6<sup>th</sup> in the halter mare competition. There were over 7,500 entries in the Show. Ron has worked with Professor John Crow since 2002 to identify new therapeutics for the treatment of amyotrophic lateral sclerosis (ALS).

UAMS Chancellor Dan Rahn, MD, presented Piper Nelson, research technician in Associate Professor Sung Rhee's laboratory, with the Employee Suggestion Program's Innovative Suggestion of the Year Award and \$1000! Nelson's suggestion was to create a smart phone application that could track the UAMS shuttle bus via GPS so employees and students would know its exact location. Now, there should be less standing out in inclement weather as well as increased productivity by employees!



## ALUMNI and OTHER FRIENDS

- **Rais A. Ansari** (Research Assistant, Gandy) is an assistant professor in the Dept of Pharmaceutical Sciences of the College of Pharmacy at Nova Southeastern University in Fort Lauderdale, FL.
- **January Baumgardner** (Ph.D., Ronis) is a lecturer at Ouachita Technical College in Malvern, AR
- **Venkata Bhogaraju** (Ph.D., Crow) is a pharmacist in the WalMart Pharmacy in Moses Lake, WA.
- **Angela Burke** (Ph.D., Hinson) passed the American Board of Toxicology exam and obtained her Diplomate of the American Board of Toxicology (DABT). She is a toxicologist with WIL Research Lab in Ashland, OH.
- **Danielle Cruthirds** (Ph.D., Macmillan-Crow) is an assistant professor in the Department of Pharmaceutical Sciences at McWhorter School of Pharmacy, Samford University.
- **Brian Cummings** (Postdoc fellow, Schnellman) was recently appointed director of the interdisciplinary toxicology program at the University of Georgia.
- **Helen Cunny** (Ph.D., Slikker) is working for the NIEHS in Research Triangle Park, NC as a project officer in the area of reproductive and developmental toxicology. Her husband, **Hudson Bates** (Ph.D., Harbison) works for NiPERA. Their children, Haley and Kathryn are in 10<sup>th</sup> and 7<sup>th</sup> grade, respectively.
- **Jaclyn Daniels** (M.S., McMillan) is a Ph.D. student in the IBS program at UAMS and writes that her family took a vacation to Disney World and bought a new house.
- **Greg Davis** (Technician, Wessinger) has worked for Apple Inc. as an Apple Solutions consultant for the last 9.5 years. He can be found almost any Thursday through Monday at Best Buy where he manages the Apple Store. He has two children, Trinity (1) and Mitchell (5).
- **Angela Disch** (Ph.D., Ali) is the clinical event manager in the Quality/Risk/Safety Department at Mercy Hospital in Fort Smith. She is married to Tommy Gray and they have one son, TJ.
- **Gloria Gabriel (Administration)** runs Gigi's Cake Boutique in Sherwood, AR. She is the mother of Ayanna, Maya, Bella and Xavier.
- **Yun Ge** (Ph.D., Light) works at the FDA/CDRH/OIVD as a scientific writer.
- **Stephanie Hastings** (Administrator) is a nurse anesthesiologist at Great Rivers Medical Center in West Burlington, I. She and husband Clay have children Andrew, Ethan, Carter, and Emma.
- **Howard Hendrickson** (Postdoc fellow, Owens) is an associate professor in the Department of Pharmaceutical Sciences at UAMS.
- **J. Hunter Holthoff** (Ph.D., Mayeux) returned to medical school at UAMS to complete his medical degree as part of the MD/PhD program.
- **Dinesh Hinenallur** (Ph.D., Rusch) is an instructor at the University of Washington.
- **Jonathan Hubbard** (Ph.D., Owens) is completing his residency at Harvard University.
- **Hartmut Jaeschke** (Professor of Toxicology) was appointed chair of the Department of Pharmacology at the University of Kansas, replacing Curt Klaassen.
- **Scott Jarmer** (M.S., Harbison) works as a pathologist in Wichita, Kansas.
- **Biny Joseph** (Ph.D., Rusch) is a research scientist at Vernenum Biodesign in New Jersey.
- **Sujay Kharade** (Ph.D., Rusch) is currently a postdoctoral fellow coordinating projects between the UAMS Departments of Pharmacology & Toxicology and Pharmaceutical Sciences.
- **Mark Levi** (Postdoctoral fellow, Crow) is employed as a pharmacologist at the Center for Biologics at the FDA.
- **Xiuli Liu** (Ph.D., Mayeux) is employed as a GI/Liver pathologist on the main campus of the Cleveland Clinic Foundation. Her husband is employed as a software engineer for Verizon, and her two children Chis (13 yr) and Katherine (9 yr) are enjoying school and life in northeast Ohio. **Cont'd**

## Alumni and Other Friends

- **John C. Lipscomb** (Ph.D., Slikker) was elected a councilor for the SOT and also serves as president of the SOT's Risk Assessment Specialty Section. He notes that he is not on parole and has not been arrested lately!
- **Alessandra Milesi-Hale** (Ph.D., Owens) is completing a residency at Arkansas Children's Hospital.
- **Tanecia Mitchell** (Ph.D., MacMillan-Crow) is a postdoctoral fellow at UA-Birmingham in the laboratory of Dr. Victor Darley-Usmar.
- **Shankar Munasamy** (Ph.D., MacMillan-Crow) is an assistant professor at Qatar University.
- **Paul Nony** (Ph.D., Schnellmann) works at CTEH as a senior toxicologist and a member of the major projects team, CTEH's first ever group dedicated to business growth and pursuing strategic goals. He travels more than he likes. If you look carefully the next time CNN covers a major industrial accident, you may see him.
- **Edith Adams Parker** (Administration) is an executive assistant in the Department of Physical Medicine and Rehab at UAMS.
- **Elina Pathak** (Ph.D., Mayeux) is a research scientist at Reliance Life Sciences in Mumbai, India.
- **Maheswari Rajasekaran** (Ph.D., Prather) returned to her native India following graduation.
- **Jennifer Gibson Schnellmann** (Ph.D., Schnellmann) is an associate professor in the College of Pharmacy at the University of South Carolina. She was awarded the Pharmacy Year 1 Student's Teacher of the Year and also the MUSC Pharmacy Teacher of the Year this past Spring. She recently published a revised version of her book, *Understanding and Conquering Fibromyalgia* as well as collection of essays and short stories titled, *Southern Ugly: A Memoir of an Unattractive Child*. She and her daughter are collaborating on a new work, *The Devil's Apothecary*, which will be an introduction to toxicology book for teens and tweens.
- **Kathryn Seely** (Postdoc, Mayeux) is a chemist at the Arkansas Department of Health.
- **John Seng** (Ph.D., Gandy/Leakey) is working in the UAMS Research Support Center as a project manager team leader for Investigator and Student Initiated Research Studies.
- **Jennifer Shoemaker** (Ph.D., Prather) is owner and a science writer with Flourish Medical Writing based in Nashville.
- **Rohit Singal** (Ph.D., Ronis) is working as a research scientist with Sanofi U.S. Inc., in Framingham, MA.
- **Swapnil Sonkusare** (Ph.D., Rusch) is a postdoctoral fellow at the University of Vermont and published a paper as first author in the May 4, 2012 issue of *Science*. At EB2012 he was awarded first prize in the postdoctoral scientist oral presentation competition. Swapnil and his wife have a 14-month girl named Aanya.
- **Keshari Thakali** (Postdoc, Rusch) is a postdoctoral fellow at Arkansas Children's Nutrition Center.
- **Misty Thompson** (Ph.D., Crow) is working as a postdoctoral fellow at Vanderbilt in the Department of Physiology and Biophysics. She has applied to a certification program in Molecular Medicine which is co-sponsored by the Howard Hughes Medical Institute and provides training in translational medicine.
- **Manish Tiwari** (Ph.D., Mayeux) is a physician and researcher at the University of Nebraska at Omaha.
- **Linda Traylor** (Ph.D., Mayeux) reports that she and her family have moved back to Colorado. She still works for The Binding Site, Inc as the senior director of scientific affairs. Trace (4 yrs) and Victoria (2½ yrs) appear to be enjoying the outdoors of CO.
- **Zhen Wang** (Ph.D., Mayeux) is a postdoctoral fellow with Dr. John Hall at the University of Mississippi Medical Center.

## Alumni and Other Friends

- **Sarah White** (Ph.D., Owens) is a postdoctoral fellow at the Mayo Clinic in Rochester, MN.
- **Luping Wu** (Ph.D., Mayeux) is a regulatory affairs specialist at Ethicon, Inc. (Johnson & Johnson).
- **Linnzi Wright** (Ph.D., Paule) is a research scientist at the US Army Medical Research Institute of Chemical Defense in Maryland.
- **Xinwen (James) Yu** (Ph.D., Kennedy) continues his quest of personalized medicine for cancer therapy while working at Dako, an Agilent company, in CA. His wife, who completed her M.S. in nursing while at UAMS, just completed her Doctor of Nurse Practitioner degree from Chapman University.

## New arrivals during 2011-2012

**Pravnav Bhandari** was born September 11, 2011 to postdoctoral fellow Nirmala Parajuli (mentor: LeeAnn Macmillan-Crow)

**Verona Elise Franks** was born October 9, 2011 to graduate student Lirit Franks (mentor: Paul Prather)

**Natalie Carmen Bettschen** was born August 14, 2012, to postdoctoral fellow Daniela Ruedi-Bettschen (mentor: S. Michael Owens).

**Mark Karaduta** was born September 17, 2012, to postdoctoral fellow Oleg Karaduta (mentor: Alexei Basnakian).

## Can you locate these alumni?

Adams, Robert Johnson

Adatsi, Felix K

Barfield, Lisa

Baron, Scott

Bever, Ronnie Jo, Jr.

Blackall, Doug

Butler, Mary A. Stromberg

Chapman, John Raymond

Chen, Genfu

Chou, Hsien-Chang

Clevenger, Martha Ann

Cohen, Harold Gene

Cole, Troy W

Dauback, Sarah D

Driver, Malvin C., Jr.

Fadhel, Nawzad

Frame, Lynn T

Gaar or Garr, Kermit A

Garcia, Linta

Griffin, Joseph

Hall, Benjamin H

Hampton, Amber D

Hanna, Calvin

Hart, Ronald

Henry, Berch Eugene

Huey, Sally

Jerram, David C

Juan, David

Kiorpes, Anthony L

Le, Hoa

Li, Erdong

Li, Jin

Lomax, Sarah W

Lu, Song

Marvin, Peter Michael

Matthews, Anthony Michael

Medlock, Kevin Lawrence

Merritt, James M

Mitchell, Benjamin E

Montague, D. C. Eckman

Morrison, David R

Murphy, Bruce Edward

Partridge, Jennings E

Pesic, Aleksandra

Pesic, Miodrag

Plowchalk, David R.

Proksch, Joel

Rastogi, Santosh

Richtarik, Alfred A

Rock, Tara

Sarang, Satinder Singh

Schiefer, Mark Anthony

Schmid, Jack Robert

Selders, Marie

Si, Ying

Stone, William Taylor

Sun, Wen Lin

Vadlapatla, Rajesh

Vertino, Anthony

Watts, Dennis R

Williams, Richard Franklin

Williamson, Anthony Paul

Wong, Jeremy



**From Top (Left to Right)**

- 1) Clark Sims, Fred Goad, Kevin Howk, Alexei Basnakian
- 2) Ramona Burris, Ben Lieblong, Lisa Brents
- 3) John Marecki, Paul Gottschall, Max Ford, William Hyatt
- 4) Sudip Banerjee, Terry Fletcher
- 5) Dave Wessinger, Guillermo Gonzalez, Michael Cozart
- 6) Ron Reed, Emily Reichard, Lirit Franks, Sung Rhee
- 7) Paul Prather, Kevin McElhanon, Nancy Rusch
- 8) Bill Fantegrossi, Eric Peterson, Joe Stimers
- 9) Brenda Gannon, Phil Mayeux
- 10) Oleg Karaduta, Todd Fite, Martin Ronis, Piotr Zimniak, Sharda Singh
- 11) Dmitry Zhdanov, Neil Detweiler, Ludwika Zimniak, Rachel Verslius, Amanda Stolarz
- 12) Galen Wenger, Xiaoying Wang, Shraddha Thakkar
- 13) Shirley Haun, Naeem Patil, Tariq Fahmi
- 14) Celia McCaslin, Jessica Macchi, LeeAnn MacMillan-Crow, Asif Pathan
- 15) Sujay Kharade, Hong Wu, Tonya Rafferty
- 16) Nisha Nanaware, Anup Srivastava, Nirmala Parajuli, Rakhee Agarwal
- 17) Jack Hinson, Li Song, Hamida Saba
- 18) Mike Owens, Pam Kahler, Shanthi Vadali, Kerry Roberto

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