

# Rx News

A Monthly Newsletter  
of The University of Georgia College of Pharmacy  
March 2015

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## AWARDS/HONORS

### **Brian Cummings, Associate Professor**

Served as a grant reviewer for the NIH Special Emphasis Panel 2015/05 ZRG1 F09B-B Oncological Sciences

Chaired a National Symposium titled "New Technologies to Measure Mitochondria Changes" at the 2015 Experimental Biology Meeting in Boston, MA

### **Mike Fulford, Director of Assessment**

Recognized as a Diamond Honoree at the American College Personnel Association (ACPA) Conference in Tampa, FL.. The Diamond Honoree Program, established by the ACPA Foundation in 1999, recognizes professionals for their outstanding and sustained contributions to higher education and to student affairs. The program also is a fundraising activity where donations are made on behalf of the honoree. The funds raised help support scholarships and research for members of the association.

### **Dexi Liu, Panoz Professor of Pharmacy**

Served as a reviewer on panel of NIH IMST-13 Bioengineering Study Section, March 12, 2015

### **Ray Maddox, Assistant Dean, Savannah Campus**

Invited participant at the Association for the Advancement of Medical Instrumentation (AAMI) Foundation's "National Coalition for Infusion Therapy Safety" conference in Annapolis, MD, March 12-13, 2015.

### **Mandi Murph, Assistant Professor**

Served as a grant reviewer at Department of Defense Breast Cancer Research Program peer review panel, Reston, Virginia, March 18-20, 2015

### **Natalie Scholpa, graduate student with Brian Cummings, Associate Professor**

Awarded the Society for Experimental Biology and Medicine's 2015 Young Investigator Award at the 2015 Experimental Biology Meeting in Boston, MA.

## GRANTS

### **E. Lilian Sattler, Assistant Professor**

Awarded seed grant funding to establish a UGA/University of Liverpool Partnership, titled "Unmet needs and health disparity in two healthcare systems: food insecurity, medication non-adherence, access to healthcare/welfare, and chronic disease outcomes in low-income adults in the U.S. and the U.K.

## PUBLICATIONS

### **Susan Fagan, Jowdy Professor**

Ahmed H, May, DW, Fagan SC, Segar L. Vascular protection with Dipeptidyl peptidase-IV inhibitors in diabetes: Experimental and Clinical Therapeutics. Pharmacotherapy 2015, epub ahead of print March 10.

Ergul A, Valenzuela JP, Fouda A, Fagan SC. Cellular connections, microenvironment and brain angiogenesis in diabetes: Lost communication signals in the post-stroke period. (Invited Review). Brain Research 2015; epub ahead of print March 10.

**Mike Fulford, Director of Assessment**

Fulford M, Souza, JM, and Associates. Are you CAPE-A.B.L.E.? Center for the Advancement of Pharmacy Education: An Assessment Blueprint for Learning Experiences. AACP CAPE paper. October 2014. Available at <http://www.aacp.org/resources/education/cape/Documents/AssessmentCAPEPaper-Final11.pdf>

**Eileen Kennedy, Assistant Professor**

Wang Y, Ho TG, Franz E, Hermann JS, Smith FD, Hehnly H, Esseltine JL, Hanold LE, Murph MM, Bertinetti D, Scott JD, Herberg FW, Kennedy EJ\*. (2015) "PKA-type I Selective Constrained Peptide Disruptors of AKAP Complexes." ACS Chem Biol. doi: 10.1021/acschembio.5b00009 (PMID: 25765284).

Kennedy EJ, Scott JD. (2015) "Selective Disruption of the AKAP Signaling Complexes." Methods Mol Biol. 1294:137-50. doi: 10.1007/978-1-4939-2537-7\_11 (PMID: 25783883).

Hanold LE, Watkins, CP, Liaw P, Beedle AM and Kennedy EJ\*. (2015) "Design of a selenylsulfide-bridged EGFR dimerization arm mimic." Bioorg. Med. Chem., DOI 10.1016/j.bmc.2015.03.040.

**Dexi Liu, Panoz Professor of Pharmacy**

Gao M, Ma Y, Liu D (2015) High-Fat Diet-Induced Adiposity, Adipose Inflammation, Hepatic Steatosis and Hyperinsulinemia in Outbred CD-1Mice. PLoS ONE 10(3): e0119784. doi:10.1371/journal.pone.0119784

Gao M, Zhang C, Ma Y, and Liu D (2015) Cold Exposure Improves the Anti-diabetic Effect of TO901317 in Streptozotocin-induced Diabetic Mice. AAPS J. DOI: 10.1208/s12248-015-9746-4. <http://link.springer.com/article/10.1208%2Fs12248-015-9746-4>

**Dianne May, Clinical Associate Professor**

May DW, Bryant J. How to prepare an effective journal club. In: Gabay M. (ed) The Clinical Practice of Drug Information. 1st Edition, Burlington, MA: Jones & Bartlett Learning, 2015;291-309.

**Somanath Shenoy, Associate Professor**

Al-Azayzih A, Gao F, Somanath PR. P21 activated kinase-1 mediates transforming growth factor  $\beta$ 1-induced prostate cancer cell epithelial to mesenchymal transition. Biochim Biophys Acta - Mol Cell Res. (2015) Mar 6; 1853(5):1229-1239.

Although identified as a tumor suppressor, transforming growth factor beta (TGF $\beta$ ) was later found to inexplicably shun its suppressive role and act as a promoter of cancer metastasis through promotion of epithelial-to-mesenchymal transition (EMT). Until today, mechanism leading to this 'switch' is not clear. This study identified that TGF $\beta$  utilizes P21 activated kinase (Pak1) and Tumor necrosis factor Receptor Associated Factor-6 (TRAF6) in prostate cancer to 'switch on' EMT through expression of Snail and N-cadherin. Gene silencing and pharmacological inhibition of Pak1 using 'IPA3' inhibited TGF $\beta$ -induced prostate cancer growth, EMT and metastasis. Our results reveal the potential therapeutic benefits of targeting TGF $\beta$ -Pak1 pathway for advanced-stage prostate cancer.

**PRESENTATIONS****James Bruckner, Professor**

Made the following presentations on March 25 at the Society of Toxicology meeting in San Diego:

D. Gullick, James V. Bruckner, Brian S. Cummings, Catherine A. White and Michael Bartlett. Extraction of highly lipophilic pyrethroid insecticides from adipose tissue for analysis for analysis by GC-MS.

M. Amaraneni, S. Muralidhara, Jason Zastre, Catherine A. White, James V. Bruckner, and Brian S. Cummings. Determination of blood-brain-barrier permeability and uptake of deltamethrin (DLM) in adult male Sprague-Dawley rats using an in situ brain perfusion technique.

C. Chen, S. Muralidhara, D. Gullick, M. Amaraneni, T.B. Mortuza, Jing Pang, Brian Cummings, James V. Bruckner and Catherine A. White. Age-dependence of toxicokinetics of deltamethrin in Sprague-Dawley rats.

T. Mortuza, Jing Pang, S. Muralidhara, C Chen, M. Amaraneni, Brian S. Cummings, James V. Bruckner and Catherine A. White. Toxicokinetics (TK) of cis-permethrin (CIS) in adult and weanling Sprague-Dawley rats.

**Brian Cummings, Associate Professor**

Presented the following posters at the 54th Annual National Society of Toxicology Meeting: "Role of p21 in Cocaine-Induced Responses in vivo", presented with Natalie Scholpa (Graduate Student); and "Identification of Epigenetic Modifications of Cyclin-Dependent Kinase Inhibitors Induced by Nephrotoxicants Using Targeted DNA Methylation and Next-Generation Sequencing", presented with Ramya Kolli (Graduate Student).

Presented an invited talk titled "Mitochondrial Suppopulation Lipidomics in Aging Tissue" at the 2015 Experimental Biology Meeting in Boston MA

Presented the following posters at the 2015 Experimental Biology Meeting in Boston, MA: "Novel Roles for Hippocampal p21 in Reward-Induced Behavior", presented with Natalie Scholpa (Graduate Student); "Effect of Cocaine and p21 Expression on Alterations in the Blood Lipidome", presented with Natalie Scholpa (Graduate Student); and "Cocaine-Induced Lipidomic Alterations in Human Blood for the Study of Addictive Behaviors", presented with Sumitra Pati (Graduate Student).

**Raj Govindarajan, Associate Professor**

Presented an invited talk at the Elkin lecture at Emory Winship Cancer Institute on "Epigenetic Priming in Pancreatic Cancer Chemotherapy"

**Anthony Hawkins, Clinical Assistant Professor**

Presented "Surviving Sepsis: How Goal Oriented Should We Be?" at a Georgia Society of Health System Pharmacists (GSHP) regional meeting on March 5, at Phoebe Northwest in Albany, GA

Presented "The Limbo of ICU Sedation" at a GSHP regional meeting on March 26, at John D. Archbold Memorial Hospital in Thomasville, GA.

**Kalen Manasco, Clinical Associate Professor**

Presented a webinar for Pediatric Pharmacy Advocacy Group entitled "Platforms, posters, and presentations...oh my! Strategies for effective presentation of research" on March 11.

**Merrill Norton, Clinical Associate Professor**

The Neuropharmacology of Addiction, Alliant International University School of Psychology PostDoctoral Program, San Francisco, California;

Juvenile Courts, Substance Use, and the Adolescent Brain, Northwest Georgia System of Care, Cartersville, Georgia;

Opioid Use Disorders: The Return of the White Horse: Heroin, Alabama School of Alcohol and Drugs Studies, Tuscaloosa, Alabama;

The Pharmacogenomics of Addiction, Ridgeview Institute, Atlanta, Georgia;

The Challenges and Opportunities To Impact the Opioid Dependence Crisis, American Association for the Treatment of Opioid Dependence International Meeting, Atlanta, Georgia

**E. Lilian Sattler, Assistant Professor**

Presentation at Experimental Biology 2015 in Boston, MA, on April 29: Sattler, E.L. P., Lee J.S., Young, H. N. (2015). Food Insecurity, Medication Non-adherence, and Inpatient Hospital Readmissions in Low-income Older Medicare Beneficiaries in Need of Food Assistance.

**Somanath Shenoy, Associate Professor**

Presented Fei Gao, Ahmad Al-Azayzih, Somanath PR. Discrete functions of GSK3alpha and GSK3beta in prostate cancer growth and micrometastasis at the 'Prostate cancer and Breast Cancer session' of the 'Experimental Biology Meeting', Boston, MA on March 30, 2015

**OTHER NEWS**

**Clinical and Experimental Therapeutics (CET) program** participated in the 31 annual Graduate Research Day at Georgia Regents University; CET had a total of 11 presentations (9 graduate students and 2 post-docs) out of 121 presented by different schools and units