

Rx News

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

AWARDS/HONORS

Amber Clemmons, Clinical Assistant Professor

Appointed Chair of the program committee for the Hematology/Oncology Pharmacy Association (HOPA) for 2015-16

Brian Cummings, Associate Professor

Elected as the Vice-President Elect of the Mechanisms Specialty Section of the National Society of Toxicology

Lori Duke, Assistant Dean for Experience Programs

Elected Liaison to the ACPE International Services Program Commission

Rajgopal Govindarajan, Associate Professor

Served as a grant reviewer to Hong Kong reviewer Innovation and Technology Commission, The Government of the Hong Kong Special Administrative Region

Dexi Liu, Professor and Head, Pharmaceutical and Biomedical Sciences

Served as reviewer for the NIH/NHLBI program project grant, Jan. 16, 2015

Cory Momany, Associate Professor

One of 25 UGA professors selected as CTL Fellow for Innovative Teaching to participate in 2015: Focus on Flipping the Classroom

Somanath Shenoy, Associate Professor

Served on an invited review panel of the Medical Research Council, UK

GRANTS

Dexi Liu, Professor and Head, Pharmaceutical and Biomedical Sciences

Received \$150,000 from the American Heart Association for study of genetic circuit for prevention of hyperlipidemia-mediated atherosclerosis

Scott Pegan, Associate Professor

Received \$260,442 from USDA ARS for study of porcine epidemic diarrhea virus (PEDV) and porcine delta coronavirus (PDCOV) protease function and modification to improve swine innate immunity

PUBLICATIONS

Rajgopal Govindarajan, Associate Professor

Published a paper 'Defective hCNT1 transport contributes to gemcitabine chemoresistance in ovarian cancer subtypes: Overcoming transport defects using a nanoparticle approach' in the journal Cancer Letters (published 2015 Jan 16. pii: S0304-3835(15)00039-7).
Authors: Hung SW, Marrache S, Cummins S, Bhutia YD, Mody H, Hooks SB, Dhar S, Govindarajan R.

Eileen Kennedy, Assistant Professor

Oxidation of the aromatic amino acids tryptophan and tyrosine disrupts their anabolic effects on bone marrow mesenchymal stem cells. El Refaey M1, Watkins CP2, Kennedy E2, Chang A3, Zhong Q1, Ding KH1, Shi XM4, Xu J5, Bollag WB6, Hill WD7, Johnson M8, Hunter M9, Hamrick MW10, Isaacs CM11; Mol Cell Endocrinol. 2015 Jan 28. pii: S0303-7207(15)00058-1. doi: 10.1016/j.mce.2015.01.034. [Epub ahead of print]

Dexi Liu, Professor and Head, Pharmaceutical and Biomedical Sciences

Book Edited

Leaf Huang, Dexi Liu, and Ernst Wagner (Eds) (2015) Nonviral Vectors for Gene Therapy, Volume 89: Physical Methods and Medical Translation. Academic Press, San Diego, 296 pages. <http://www.amazon.com/Non-Viral-Vectors-Gene-Therapy-Volume/dp/0128022728>

Paper Published

Alsaggar, M., and Liu, D. (2015). Physical Methods for Gene Transfer. In L. Huang, D. Liu, & E. Wagner (Eds.), Non-Viral Vectors for Gene Therapy: Physical Methods and Medical Translation (pp. 1–24).

Suda, T., and Liu, D. (2015). Hydrodynamic Delivery. In L. Huang, D. Liu, & E. Wagner (Eds.), Non-Viral Vectors for Gene Therapy: Physical Methods and Medical Translation (pp. 89–111).

Scott Pegan, Associate Professor

Inherent dynamics within the Crimean-Congo Hemorrhagic fever virus protease are localized to the same region as substrate interactions. Eisenmesser EZ, Capodagli G, Armstrong G, Holliday MJ, Isern NG, Zhang F, Pegan SD. Protein Sci. 2015 Jan 6. doi: 10.1002/pro.2637. [Epub ahead of print]

Somanath Shenoy, Associate Professor

Gao F, Al-Azayzih A and Somanath P.R. 2015. Discrete functions of GSK3 α and GSK3 β in prostate cancer tumor growth and micrometastasis. Oncotarget, (In Press).

Glycogen synthase kinase-3 (GSK3) first identified as a metabolic enzyme involved in carbohydrate metabolism was later identified to be activated during various diseases such as cancer, bipolar disease and diabetes. The role of GSK3 that exists in two different isoforms namely GSK3 α and GSK3 β is not yet characterized in any disease states. Our study was focused on characterizing the isoform specific role of GSK3 α and GSK3 β in the regulation of prostate cancer progression and metastasis through specific gene knockdown and through preclinical studies in rodent models. This manuscript published in the journal 'Oncotarget' discusses the specific role of GSK3 α during the early stages of prostate cancer growth via regulation of apoptosis and proliferation, and the importance of GSK3 β during the advanced stages of prostate cancer. We identified that GSK3 β is involved in the differentiation of early stage prostate cancer cells into more aggressive ones through a process known as epithelial-to-mesenchymal transition, thus promoting its entry into circulation and subsequent metastasis to distant tissues such as lung and bone. Our study generates reasonable optimism on the beneficial effects of targeting one or both of the GSK3 isoforms for the management of advanced prostate cancer. Study was funded by the UGA College of Pharmacy funds and departmental TRI Grant.

George Zheng, Associate Professor

Hao Hu, Eric A. Owens, Hairui Su, Leilei Yan, Andrew Levitz, Xinyang Zhao, Maged Henary, and Y. George Zheng. Exploration of Cyanine Compounds as Selective Inhibitors of Protein Arginine Methyltransferases: Synthesis and Biological Evaluation. (2015) Journal of Medicinal Chemistry. In Press. <http://pubs.acs.org/doi/abs/10.1021/jm501452j>

PRESENTATIONS

Houjian Cai, Assistant Professor

Presented to the Elkin lecture on Jan. 16th, 2015 with the title "Src kinase mediates dietary saturated fatty acids accelerated prostate tumor progression" in Winship Cancer Institute of Emory University.

Amber Clemmons, Clinical Assistant Professor

Presented "Haploidentical Stem Cell Transplantation", Pharmacy Grand Rounds, UGA/GRU, Augusta, GA , January 21, 2015

Rajgopal Govindarajan, Associate Professor

Gave an invited seminar on 'Epigenetic Priming in Pancreatic Cancer Chemotherapy' at Ohio State University Comprehensive Cancer Center (OSUCCC): Jan 29 2015

Anthony Hawkins, Clinical Assistant Professor

Presented "Prevalence and Factors Associated with Absence of Venous Thromboembolism Prophylaxis" as a poster at the SCCM Annual Congress in Phoenix, AZ.

Eileen Kennedy, Assistant Professor

Gave an invited seminar entitled "Chemical Biology Tools to Study Kinase Regulation" at the Max Planck Institute for Molecular Physiology in Dortmund, Germany on Jan. 19.

Gave an invited Keynote lecture entitled "Chemical Biology Tools to Study Kinase Regulation" at the 12th Annual Biochemistry Retreat for the University of Kassel in Wesendorf, Germany, Jan. 21-24.

J. Russell May, Clinical Professor

Presented "New Drug Update 2015: A Formulary Approach", Pharmacy Grand Rounds, UGA/GRU, Augusta, GA , January 14, 2015

Presented "New Drug Update 2015: A Formulary Approach", Atlantic Province of Kappa Psi Pharmaceutical Fraternity, Winter Province Assembly, Athens, GA, January 24, 2015

Scott Pegan, Associate Professor

Conference Poster Presentation:

The vOTU domain of highly-pathogenic porcine reproductive and respiratory syndrome virus displays a differential substrate preference. Deaton MK, Spear, Faaberg KS, Pegan SD. Keystone Viral Immunity, January 11, 2015 Beaver Run, Colorado