PHARMSCI DEPARTMENT NEWSLETTER

February 2019

OUR DEPARTMENT

Wen Xie, MD, PhD
Department Chair
306 Salk Pavilion
335 Sutherland Drive
Pittsburgh, PA 15261
412-648-9941
wex6@pitt.edu

Karen Wagner

Department Administrator 305 Salk Pavilion 335 Sutherland Drive Pittsburgh, PA 15261 412-383-4530 kbw17@pitt.edu

MESSAGE FROM THE DEPARTMENT

Our Department newsletter will be distributed to departmental faculty every two months. The purpose of the newsletter is to announce the achievements of faculty and their lab members in research, teaching, and service in a timely and succinct manner. The newsletter is meant to be a simple listing of your achievements and newsworthy events, so detailed elaborations are not necessary.

The Department newsletter is designed to be complementary to the School of Pharmacy's Event Notification. Please continue submitting your newsworthy events through the School of Pharmacy's Event Notification via the School of Pharmacy Intranet (https://intranet.pharmacy.pitt.edu).

Please submit your items to Karen Wagner by email (kbw17@pitt.edu).

PUBLICATIONS

Li J, Gibbs RB. Detection of estradiol in rat brain tissues: Contribution of local versus systemic production. *Psychoneuroendocrinology*. 2018 Dec 1;102:84-94. doi: 10.1016/j.psyneuen.2018.11.037. [Epub ahead of print]. PMID: 30529907

Yin J, Chapman K, Clark LD, Shao Z, Borek D, Xu Q, **Wang J**, Rosenbaum DM.Crystal structure of the human NK1 tachykinin receptors. *Proc Natl Acad*

Sci U S A. 2018 Dec 26;115(52):13264-13269. PMID:30538204

Chen L, Liu Q, Tang Q, Kuang J, Li H, Pu S, Wu T, Yang X, Li R, Zhang J, Zhang Z, Huang Y, Li Y, Zou M, Jiang W, Li T, Gong M, Zhang L, Wang H, Qu A, **Xie W**, He J. Hepatocyte-specific Sirt6 deficiency impairs ketogenesis. *J Biol Chem*. 2018 Dec 10 [Epub ahead of print] PMID: 30530497

Guo GL, **Xie W**. Metformin action through the microbiome and bile acids. *Nat Med*. 24: 1789-1790 (2018) PMID: 30523325

Xu D, Huang S, Wang H, **Xie W**. Regulation of brain drug metabolizing enzymes and transporters by nuclear receptors. *Drug Metab Rev.* 50: 407-414 (2018) PMID: 30501435

Li B, Zhu Y, Chen H, Gao H, He H, Zuo N, Pei L, **Xie W**, Chen L, Ao Y, Wang H. Decreased H3K9ac level of AT2R mediates the developmental origin of glomerulosclerosis induced by prenatal dexamethasone exposure in male offspring rats. *Toxicology*. 411: 32-42 (2018) PMID: 30359671

Ren T, Yang M, Xiao M, Zhu J, **Xie W**, Zuo Z. Time-dependent inhibition of carbamazepine metabolism by piperine in anti-epileptic treatment. *Life Sci.* 2019 Jan 3. [Epub ahead of print] PMID: 30611786

Smithburger P, **Zemaitis M**, and Meyer S. Evaluation of medical marijuana topics in the PharmD curriculum: A national survey of school and colleges of pharmacy. *Curr Pharm Teach Learn*. 2019 Jan;11(1):1-9. doi: 10.1016/j.cptl.2018.09.022. Epub 2018 Oct 3.

Cotticelli MG, Xia S, Lin D, Lee T, Terrab L, **Wipf P, Huryn D,** Wilson R. Ferroptosis as a novel therapeutic target for Friedreich's ataxia. *J Pharmacol Exp Ther*. 2019 Jan 11. pii: jpet.118.252759. doi: 10.1124/jpet.118.252759. [Epub ahead of print] PMID: 30635474

Man V, Truong P, Li M, **Wang J**, Van-Oanh N-T, Derreumaux P, Nguyen P. Molecular Mechanism of the Cell Membrane Pore Formation Induced by Bubble Stable Cavitation. *J. Phys. Chem. B*. 2019 Dec 12: *123*, 71-78. doi: 10.1021/acs.jpcb.8b09391. [Epub ahead of print].PMID: 30540473

Yin J, Chapman K, Clark LD, Shao Z, Borek D, Xu Q, **Wang J**, Rosenbaum D. Crystal structure of the human NK1 tachykinin receptor. *Proc Natl Acad Sci U S A.* 2019 Dec 26: *115(52)*, 13264-13269. doi: 10.1073/pnas.1812717115. Epub 2018 Dec 11. PMID: 30538204

Wang J, Ge Y, Xie X-Q. Development and testing of druglike screening libraries. *J. Chem. Inf. Model.* 2018 Dec 18. doi: 10.1021/acs.jcim.8b00537. [Epub ahead of print] PMID: 30563329

Man V, He X, Derreumaux P, Ji B, **Xie X-Q**, Nguyen P, **Wang J**. Effects of all-atom molecular mechanics force fields on Amyloid peptide assembly: the case of Aβ16-22 Dimer. *J. Chem. Theor. Comput.* **2019** Jan **11**. DOI: 10.1021/acs.jctc.8b01107. [Epub ahead of print] PMID: 30633867

Wang J, Cieplak P, Luo R, Duan Y. Development of Polarizable Gaussian Model for Molecular Mechanical Calculations I: Atomic Polarizability Parameterization to Reproduce Ab Initio Anisotropy. *J Chem Theor Comput.* 2019 Jan 15. DOI: 10.1021/acs.jctc.8b00603. PMID: 30645118

GRANTS

Junmei Wang

Title: Quantitatively predict drug-drug interactions between oxycodone and other drugs by pharmacokinetics modeling and simulations

Funding agency: PITT Clinical & Translational Science Institute

Funding period: 02/01/2019-01/31/2020

Role: Principal Investigator

INVITED PRESENTATIONS

Wen Xie was an invited speaker at the 12th Biennial Meeting of Chinese Biological Investigators Society (CBIS). Shenzhen, China. December 21- 24, 2018. The title of his presentation was "The Role of Aryl Hydrocarbon Receptor (AhR) in Liver Fibrosis."

Wen Xie was an invited speaker at the School of Pharmaceutical Sciences, Sun Yat-Sen University. Guangzhou, China. December 25, 2018. The title of his presentation was "The Cell-Type Specific Role of AhR in Liver Fibrosis."

Wen Xie was an invited speaker at the Center of Reproductive Medicine, Department of Obstetrics and Gynecology, Peking University Third Hospital. Beijing, China. January 2, 2019. The title of presentation was "Tissue-Specific Sex Hormone Homeostasis in Energy Metabolism."

Wen Xie was an invited speaker at the School of Public Health, Peking University Health Science Center. Beijing, China. January 4, 2019. The title of his presentation was "Nuclear Receptors in Molecular Toxicology and Xenobiotic Metabolism."

Donna Huryn was an invited guest at the University of Minnesota School of Pharmacy, Department of Medicinal Chemistry on January 22 and 23. She delivered a lecture entitled: "Academic Drug Discovery: Playing to the Strengths to Address Challenging Targets & Diseases"

PROFESSIONAL SERVICE

Song Li has been appointed Director of the Center for Pharmacogenetics effective December 1, 2018.

Jan Beumer has been appointed Co-Editor-in-Chief of *Cancer Chemotherapy & Pharmacology* with a start date of October 1, 2019.

Donna Huryn was elected as Chair-elect of the Pharmaceutical Sciences Section of the AAAS. Her term runs from Feb 2019-Feb 2022.

Donna Huryn was an *ad hoc* Reviewer for the American Cancer Society (January 24, 2019).

STUDENT ACHIEVEMENTS

Anne Barbosa's abstract titled "Estrogen Sulfotransferase (EST) as a Mediator of Ischemic Acute Kidney Injury in Mice" has been selected for a podium presentation at the 2019 Endocrine Annual Meeting, March 23-26, New Orleans, LA. Anne Barbosa's primary advisor is **Wen Xie**.