
Research Papers

- Baskaran P, Krishnan V and Thyagarajan, B. Implications of Obesity on Neuromuscular Functions-The Known And Unknown BAOJ Obe Weight Manage 2015, 1:1 1: 003
- The TRPM8 Protein is a Testosterone Receptor. Part II: Functional Evidence for an Ionotropic Effect of Testosterone on TRPM8. Asuthkar S, Demirkhanyan L, Sun X, Elustondo P, Krishnan V, Baskaran P, Velpula KK, Thyagarajan B, Pavlov E, Zakharian E. *J Biol Chem*. 2015 Jan 30;290(5):2670-88.
- The TRPM8 Protein is a Testosterone Receptor. Part I: Biochemical Evidence for Direct TRPM8-Testosterone Interactions. Asuthkar S, Elustondo PA, Demirkhanyan L, Sun X, Baskaran P, Velpula KK, Thyagarajan B, Pavlov E, Zakharian E. *J Biol Chem*. 2015 Jan 30;290(5):2659-69.
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- Yin Z, Ren J and Guo W. 2015. Sarcomeric protein isoform transitions in cardiac muscle: A journey to heart failure. *BBA-Molecular Basis of Disease* 1852(1): 47-52, 2015.
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Book Chapter

- Nair S, Swaroop A, Bagchi D, Novel Chromium (III) Supplements and Nutrigenomics In: *Genomics, Proteomics and Metabolomics in Nutraceuticals and Functional Foods*, Eds: Bagchi D, Swaroop A, Bagchi M, 2nd Edition, Wiley, pp. 518-22, 2015
- Guo Wei and Greaser, M.L. 2015. “New aspects of meat quality-from genes to ethics”, ed. Peter Purslow, Elsevier, Philadelphia, PA, in press

Meeting Presentations

- Harnessing the potential of chili peppers to prevent fatty liver: TRPV1 activation couples to SiRT-1 to antagonize diet-induced non-alcoholic fatty liver disease. Mountain West Clinical Translational Research - Infrastructure Network 2nd Annual Meeting, UNLV, Las Vegas, NV, June 08-10, 2015.
- Capsaicin Activates TRPV1-CaMKII-AMPK-SiRT-1-Dependent Mechanism to Trigger Browning of White Adipocytes to Antagonize Diet-Induced Obesity. Annual Meeting of Atherosclerosis, Thrombosis and Vascular Biology, San Francisco, CA, May 08, 2015.
- Capsaicin Fuels a Fire in Fat: A Novel Approach to Counteract Obesity. American College of Sports Medicine –Rocky Mountain Chapter Annual Meeting, Denver, CO, March 28, 2015.
- Harnessing the potential of chili peppers to prevent fatty liver: TRPV1 activation couples to SiRT-1 to antagonize diet-induced non-alcoholic fatty liver disease. Mountain West Clinical Translational Research - Infrastructure Network 2nd Annual Meeting, UNLV, Las Vegas, NV, June 08-10, 2015.
- Capsaicin Activates TRPV1-CaMKII-AMPK-SiRT-1-Dependent Mechanism to Trigger Browning of White Adipocytes to Antagonize Diet-Induced Obesity. Annual Meeting of Atherosclerosis, Thrombosis and Vascular Biology, San Francisco, CA, May 08, 2015.
- Capsaicin Fuels a Fire in Fat: A Novel Approach to Counteract Obesity. American College of Sports Medicine –Rocky Mountain Chapter Annual Meeting, Denver, CO, March 28, 2015.
- Nair S, Hua Y, Bagchi D, Anand S. FenfuroTM Attenuates Diet-Induced Insulin Resistance and Hepatic Fat Accumulation. *Experimental Biology* 2015, March 28-Apr 1, Boston, MS, POSTER presentation. Abstract: *FASEB Journal*. 29: 944.5, 2015.
- Guo R, Nair S, Ren J. Cathepsin K Knockout Protect Against Ethanol Toxicity-Induced Cardiac Dysfunction. *Circulation*, 2015.
- Cao L, Qin X, Zheng T, Nair S, Ren J, He G. Caspase recruitment domain-containing protein 9 deficiency mitigates obesity-induced cardiac dysfunction. *Circulation* 132:A13458, 2015.
- Chen X, Nair S, Wang X, Ren J. PTP1B knockout rescues against ER stress-induced myocardial contractile dysfunction: Role of autophagy. Poster presentation, 35th ISHR North American Section meeting, Seattle, WA, USA, 2015.
- Chen X, Zhu X, Wang X, Ren J. Autophagy induction using rapamycin rescues against targeted deletion of PTEN in cardiomyocyte-induced cardiac contractile dysfunction. Poster presentation, 35th ISHR North American Section meeting, Seattle, WA, USA, 2015.
- Guo R, Hua Y, Rogers O, Shi GP, Ren J, Nair S. Cathepsin K Knockout Preserves Cardiac Function in Streptozotocin-Induced Diabetic Mice: Role of Akt/GSK3 β and Oxidative Stress. 2015 AHA Scientific Session, Orlando, FL.

Liu X, Xu X, Zhang Y, Ren J. Beclin-1 haploinsufficiency protects against obesity-induced cardiac dysfunction through compensatory mitophagy and alternative autophagy. *Circulation* 132:A18792, 2015.

Liu X, Sun X, Dong Z, Wang P, Zhu H, Sun A, Ren J. Mitochondrial aldehyde dehydrogenase 2 (ALDH2) deficiency impairs revascularization in chronic ischemia and contributed to poor coronary artery collateral circulation. Poster presentation, 35th ISHR North American Section meeting, Seattle, WA, USA, 2015.

Liu X, Sun X, Zhu H, Ma X, Sun A, Ren J. Moderate over-expression of human apolipoprotein C-III (APOC3) increases high fat diet induced body weight gain but ameliorates insulin resistance. Western region COBRE-INBRE Scientific conference. Coeur d'Alene, ID. October 12-14, 2015 (Poster)

Pang J, Xu X, Zhang Y, Chen Y, Ren J. Mitochondrial Aldehyde Dehydrogenase (ALDH-2) Protects Against Lipopolysaccharide-induced Myocardial Contractile Dysfunction by Suppression of ER stress via Regulation of Autophagy. ATVB Meeting, San Francisco, CA 2015.

Ren J. ALDH2, angiotensin II and cardiac remodeling. ALDH2 International Symposium, Jinan, 2015.

Ren J. Cardiac autophagy in obesity. 35th ISHR North American Section meeting, Seattle, WA, USA, 2015.

Ren J. Epigenetics and cardiovascular diseases. Northeastern Cardiovascular Symposium, Shenyang, 2015.

Wang Q, Kandadi MR, Ren J. Genetic Deletion of Akt2 and AMPK accentuates Insulin Resistance-Induced Cardiac Contractile Anomalies. ATVB Meeting, San Francisco, CA 2015.

Wang Q, Ren J. Trehalose ameliorates insulin resistance-induced cardiac dysfunction in an Akt knockout murine model. NIH IDeA Western Regional Conference, Coeur d'Alene, Idaho. October 12-14, 2015 (Poster).

Wang Q, Ren J. Trehalose ameliorates insulin resistance-induced cardiac dysfunction in an Akt knockout murine model. ACF/CAAC joint AHA meeting, Orlando, Florida. November 7th, 2015 (Poster).

Wang S, Dong M, Ren J. Toll-like receptor 4 knockout alleviates paraquat-induced cardiomyocyte contractile dysfunction through an autophagy-dependent mechanism. Poster presentation, 35th ISHR North American Section meeting, Seattle, WA, USA, 2015.

Wang S, Yang L, Zhang Y, Ren J. Akt2 Ablation Attenuates Paraquat-Induced Cardiac Contractile Anomalies and Mitochondrial Injury. Western region COBRE-INBRE Scientific conference. Coeur d'Alene, ID. October 12-14, 2015 (Poster)

Wang S, Yang L, Zhang Y, Ren J. Akt2 Ablation Attenuates Paraquat-Induced Cardiac Contractile Anomalies and Mitochondrial Injury. ACF/CAAC joint AHA meeting, Orlando, FL. November 7-11, 2015. (Poster)

Zhang Y. ALDH2 and diabetic cardiomyopathy. ALDH2 International Symposium, Jinan, 2015.

Grant Awards

Thyagarajan B: AHA BGIA, Wyoming INBRE Thematic, UW Faculty GIA, WY NASA Faculty Research Initiation Grant

Ren J: Wyoming INBRE-3

Nair S: Wyoming INBRE Bride Funding, NIH CTRN-IN, Cepham Inc New Jersey

Guo W: Wyoming INBRE Thematic, USDA/NIFA, UW Faculty GIA, UW AES, AHA BGIA

He G: Wyoming INBRE Pilot, UW Faculty GIA, UW COH Faculty GIA

GROUP NEWS

Dr. Yinan Hua (pictured here with advisor Nair S and co-advisor Ren J) won University of Wyoming Best PhD dissertation award.

Xiyao Chen (pictured here with advisor Ren J) completed her 1.5 years of training here in SOP.



Sreejayan Nair and **Jun Ren** chaired a session for “Novel Targets for Treatment of Cardiometabolic Diseases, Wednesday, 4/6, 2016 for EB meeting in San Diego, CA.



Zhiyong Yin (pictured in the middle) completed his training and returned to the Fourth Military Medical University as a cardiologist.

CCRAM hosted a group of pharmacy students from FMMU, Xian as an official institutional exchange program.