

Issue 1, May, 2010

# CCRAM Newsletter



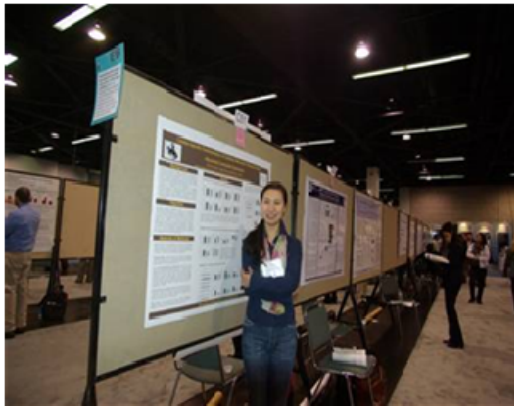
Center for Cardiovascular Research and Alternative Medicine, University of Wyoming

*Dear Colleagues,*

*Here is your first issue of CCRAM newsletter for 2010 which was long due. The CCRAM researchers began this year on a very positive note with over 40 publications and several presentations at national and international meetings. We hope to keep up this tempo for the rest of the year. As always, please email me the news items from your lab as and when possible so that we can include the information in the newsletter. Thank you all for your support.*

*-Editor*

## CCRAM Researchers Present at EB-2010



Several CCRAM researchers attended and presented their research findings at the recently concluded Experimental Biology Meeting at Anaheim, CA. Dr. Asli Ceylan Isik, Mr. Nathan D. Roe, Dr. Wei Ge (photo, left), Dr. Yingmei Zhang (photo, right) presented posters and Dr. Jun Ren presented an invited lecture at the meeting (for more details see inside).

### Inside this issue:

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## Research Papers in Press/Print

1. **Ceylan-Isik AF, McBride SM, and Ren J.** Sex difference in alcoholism: who is at a greater risk for development of alcoholic complication? *Life Sci*: in press.
2. **Ceylan-Isik AF\*, Zhao P\*, Zhang B, Xiao X, Su G, and Ren J.** Cardiac overexpression of metallothionein rescues cardiac contractile dysfunction and endoplasmic reticulum stress but not autophagy in sepsis. *J Mol Cell Cardiol* 48: 367-378, 2010. (\*Equal contribution)
3. **Du M, Tong J, Zhao J, Underwood KR, Zhu M, Ford SP, and Nathanielsz PW.** Fetal programming of skeletal muscle development in ruminant animals. *J Anim Sci* 88: E51-60, 2010.
4. **Du M, Yan X, Tong JF, Zhao J, and Zhu MJ.** Maternal obesity, inflammation, and fetal skeletal muscle development. *Biol Reprod* 82: 4-12, 2010.
5. **Du M, Yin JD, and Zhu MJ.** Cellular signaling pathways regulating adipogenesis and marbling of skeletal muscle. *Meat Sci*, in press.
6. **Fan X, Turdi S, Ford SP, Hua Y, Nijland MJ, Zhu M, Nathanielsz PW, and Ren J.** Influence of gestational overfeeding on cardiac morphometry and hypertrophic protein markers in fetal sheep. *J Nutr Biochem*, in press.
7. **Ge W\*, Li Q\*, Turdi S, Wang XM, and Ren J.** Deficiency of insulin-like growth factor 1 (IGF-1) reduces vulnerability to chronic alcoholism-induced cardiomyocyte dysfunction. *J Cell Mol Med*, acceptable (minor revision). \*Equal contribution.
8. **Guo R and Ren J.** Alcohol and acetaldehyde in public health: from marvel to menace. *Int J Environ Res Public Hlth* 7: 1285-1301, 2010.
9. **Guo R and Ren J.** Alcohol dehydrogenase accentuates ethanol-induced myocardial dysfunction and mitochondrial damage in mice: role of mitochondrial death pathway. *PLoS One* 5: e8757, 2010.
10. **Guo R, Scott GI, and Ren J.** Involvement of AMPK in alcohol dehydrogenase accentuated myocardial dysfunction following acute ethanol challenge in mice. *PLoS One*, in press
11. **Hu H, Li DL, Fan L, Ren J, Wang SP, Jia B, Liu BH, Sun L, Yu XJ, and Zang WJ.** Involvement of volume-sensitive Cl<sup>-</sup> channels in the proliferation of human subcutaneous pre-adipocytes. *Clin Exp Pharmacol Physiol* 37: 29-34, 2010.
12. **Hua Y, Kandadi MR, Zhu M, Ren J, and Sreejayan N.** Tauroursodeoxycholic acid attenuates lipid accumulation in endoplasmic reticulum-stressed macrophages. *J Cardiovasc Pharmacol* 55: 49-55, 2010.
13. **Huang Y, Yan X, Zhu MJ, McCormick RJ, Ford SP, Nathanielsz W, and Du M.** Enhanced transforming growth factor  $\beta$  (TGF- $\beta$ ) signaling and fibrogenesis in fetal skeletal muscle of obese sheep at late gestation. *Am J Physiol- Endocrinol Metab*, in press.
14. **Kandadi MR, Rajanna PK, Unnikrishnan MK, Boddu SP, Hua Y, Li J, Du M, Ren J, and Sreejayan N.** 2-(3,4-Dihydro-2H-pyrrolium-1-yl)-3oxoindan-1-olate (DHPO), a novel, synthetic small molecule that alleviates insulin resistance and lipid abnormalities. *Biochem Pharmacol* 79: 623-631, 2010.
15. **Kandadi MR, Warriar A, Du M, Ren J, and Sreejayan N.** Chromium (D-phenylalanine)<sub>3</sub> Alleviates High Fat-Induced Insulin Resistance and Lipid Abnormalities. *J Nutr Biochem*, (minor revisions).
16. **Li F, Yin J, Ni J, Liu L, Zhang H, and Du M.** Chloride intracellular channel 5 modulates adipocyte accumulation in skeletal muscle by inhibiting preadipocytes differentiation. *J of Cell Biochem*, accepted.
17. **Li Q, Turdi S, Thomas DP, Zhou T, and Ren J.** Intra-myocardial delivery of mesenchymal stem cells ameliorates left ventricular and cardiomyocyte contractile dysfunction following myocardial infarction. *Toxicol Lett* 195: 119-126, 2010.
18. **Ma H, Guo R, Yu L, Zhang YM, and Ren J.** Aldehyde dehydrogenase 2 (ALDH2) rescues myocardial ischemia/reperfusion injury: Role of autophagy paradox and toxic aldehyde. *Eur Heart J*, acceptable.
19. **Ma H, Jones KR, Guo R, Xu P, Shen Y, and Ren J.** Cisplatin compromises myocardial contractile function and mitochondrial ultrastructure: role of endoplasmic reticulum stress. *Clin Exp Pharmacol Physiol* 37: 460-465, 2010.
20. **Ma H, Wang JY, Thomas DP, Tong C, Leng L, Wang WK, Merk M, Zierow S, Bernhagen J, Ren J, Bucala R, and Li J.** Impaired macrophage migration inhibitory factor (MIF)-AMPK activatin and ischemic recovery in teh senescent heart. *Circulation*, in press.
21. **Ma H, Yu L, Byra EA, Hu N, Kitagawa K, Nakayama KI, Kawamoto T, and Ren J.** Aldehyde dehydrogenase 2 knockout accentuates ethanol-induced cardiac depression: Role of protein phosphatases. *J Mol Cell Cardiol*, in press.
22. **Ren J, Dong F, Cai GJ, Zhao P, Nunn JM, Wold LE, and Pei J.** Interaction between age and obesity on

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**CCRAM  
researchers  
have papers  
published/  
accepted for  
publication  
in high  
journals  
including  
J. Mol. Cell.  
Cardiol.,  
PLoS One,  
Eur. Heart J,  
Circulation,  
Aging Cell,  
FASEB J.  
and Free  
Rad. Biol.  
Med.**

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## Publications (continued from page 2)

- cardiomyocyte contractile function: role of leptin and stress signaling. *PLoS One* 5: e10085, 2010.
23. **Sreejayan N, Marone P, Lau FC, Yasmin T, Bagchi M, and Bagchi D.** Safety and Toxicological Evaluation of a Novel Chromium(III) Dinicocysteinate Complex. *Toxicol Mech Methods* in press.
  24. **Teng M, Dang YM, Zhang JP, Zhang Q, Fang YD, Ren J, and Huang YS.** Microtubular stability affects cardiomyocyte glycolysis by HIF-1 $\alpha$  expression and endonuclear aggregation during early stages of hypoxia. *Am J Physiol Heart Circ Physiol* 298: H1919-1931, 2010.
  25. **Turdi S, Fan X, Li J, Zhao J, Huff AF, Du M, and Ren J.** AMP-Activated Protein Kinase Deficiency Exacerbates Aging-Induced Myocardial Contractile Dysfunction. *Aging Cell*, in press.
  26. **Underwood KR, Tong JF, Price PL, Roberts AJ, Grings EE, Hess BW, Means WJ, and Du M.** Gestational nutrition affects growth, adipose tissue deposition, and tenderness in steers. *Meat Sci*, accepted.
  27. **Wang GJ, Lin YL, Chen CH, Wu XC, Liao JF, and Ren J.** Cellular calcium regulatory machinery of vasorelaxation elicited by petasin. *Clin Exp Pharmacol Physiol* 37: 309-315, 2010.
  28. **Wang J, Ma H, Tong C, Zhang H, Lawlis GB, Li Y, Zang M, Ren J, Nijland MJ, Ford SP, Nathanielsz PW, and Li J.** Overnutrition and maternal obesity in sheep pregnancy alter the JNK-IRS-1 signaling cascades and cardiac function in the fetal heart. *FASEB J*, in press.
  29. **Wang L, Tao Y, Xie Z, Ran X, Zhang M, Wang Y, Luo X, Hu M, Gen W, Wufuer H, Li L, Ren J, and Mao X.** Prevalence of metabolic syndrome, insulin resistance, impaired fasting blood glucose and dyslipidemia in Uygur and Kazak populations. *J Cardiometabol Syndrom*, in press.
  30. **Yan X, Zhu MJ, Xu W, Tong JF, Ford SP, Nathanielsz PW, and Du M.** Up-regulation of Toll-like receptor 4/nuclear factor-kappaB signaling is associated with enhanced adipogenesis and insulin resistance in fetal skeletal muscle of obese sheep at late gestation. *Endocrinology* 151: 380-387, 2010.
  31. **Yang Y, Zhao C, Xiao S, Zhan H, Du M, Wu C, and Ma C.** Lipids deposition, composition and oxidative stability of subcutaneous adipose tissue and Longissimus dorsi muscle in Guizhou mini-pig at different developmental stages. *Meat Sci* 84: 684-690, 2010.
  32. **Yuan M, Ohishi M, Wang L, Raguki H, Wang H, Tao L, and Ren J.** Association between serum levels of soluble CD40/CD40 ligand and organ damage in hypertensive patients. *Clin Exp Pharmacol Physiol*, in press.
  33. **Yue T, Yin J, Li F, Li D, and Du M.** High glucose induces differentiation and adipogenesis in porcine muscle satellite cells via mTOR. *BMB Rep* 43: 140-145, 2010.
  34. **Zhang B\*, Turdi S\*, Lopez FL, Eason AR, and Ren J.** Cardiac overexpression of insulin-like growth factor 1 (IGF-1) attenuates chronic alcohol intake-induced myocardial contractile dysfunction but not hypertrophy: Role of Akt, mTOR, GSK3 $\beta$  and PTEN. *Free Rad Biol Med*, acceptable (minor revision). \*Equal contribution
  35. **Zhao J, Yue W, Zhu MJ, Sreejayan N, and Du M.** AMP-activated protein kinase (AMPK) cross-talks with canonical Wnt signaling via phosphorylation of beta-catenin at Ser 552. *Biochem Biophys Res Commun* 395: 146-151, 2010.
  36. **Zhao JX, Yan X, Tong JF, Means WJ, McCormick RJ, Zhu MJ, and Du M.** Mouse AMP-activated protein kinase  $\gamma$ -3 subunit R225Q mutation affecting mouse growth performance when fed a high-energy diet. *J Anim Sci* 88: 1332-1340, 2010.
  37. **Zhu MJ, Du M, Nathanielsz PW, and Ford SP.** Maternal obesity up-regulates inflammatory signaling pathways and enhances cytokine expression in the mid-gestation sheep placenta. *Placenta* 31: 387-391, 2010.

## Movers and Shakers (Top 3)

	Author	Other Coauthor	Paper IF>5	Meeting Abstract
<b>Guo, Rui</b>	4 (3 first)	1	3	3 (CHS/INBRE/NISBRE)
<b>Ma, H</b>	5 (4 first)	0	3	
<b>Turdi, Subat</b>	4 (3 first)	1	1	3 (INBRE/CHS/UG)

The Annual CCRAM-Research Award is presented to a CCRAM researcher who has excelled during the year in terms of publications, presentations and grants. Box– list of student investigators and their current performance.

## Research Papers in Press/Print

### Research Papers in Review

1. **Ceylian Isik A, Sreejayan N, and Ren J.** Endoplasmic reticulum Chaperon Tauroursodeoxycholic Acid Alleviates Obesity-Induced Myocardial Contractile Dysfunction. *J Mol Cell Cardiol.*, in review
2. **Dong F, Skinner DS, Wang Q, Albertson AJ, Talbott H, Wu TJ, Glucksman MJ, and Ren J.** The Heart: A novel GnRH target. *Circulation*, in review
3. **Ge W, George L, Ford SP, and Ren J.** Cardiac glucose metabolism and inflammatory response in adult offspring of nutrient restricted ewes. *J Nutr Biochem* (June 1, 2010 submission).
4. **Ge W, Zhang YM, Han XF, and Ren J.** Cardiac-specific overexpression of catalase attenuates paraquat-induced myocardial contractile dysfunction. *J Mol Cell Cardiol* (May 29 submission).
5. **Hua Y, Zhang YM, and Ren J.** Insulin-like growth factor-1 deficient mice exhibit resistance to abdominal aortic constriction-induced cardiac hypertrophy and contractile dysregulation: Role of microRNA-1 and microRNA-133a. *Cir Res*, (May 15, 2010 submission).
6. **Huang Y, Yan X, Zhu MJ, Ren J, McCormick RJ, Ford SP, Nathanielsz PW, and Du M.** Maternal obesity induces fibrosis in fetal ventricular muscle of sheep. *Endocrinology*, in review.
7. **Kandadi MR, Hua Y, Ma H, Li Q, Kuo SR, Duesbery NS, Frankel AE, and J. Ren.** Anthrax lethal toxin suppresses murine cardiomyocyte contractile function and intracellular Ca<sup>2+</sup> handling via a NADPH oxidase -dependent mechanism. *PLoS-One*, (May 25, 2010 submission).
8. **Li LL, Dong F, Hua Y, and Ren J.** Cardiomyocyte-specific knockout of endothelin A receptor ablates deep hypothermia-induced cardiac contractile dysfunction: Role of mitochondrial oxidative damage. *Circulation*, in review.
9. **Pei ZH, Meng R, Lic G, Yan G, C. X, Zhuang Z, Ren J, and Wu ZB.** Impact of angiotensin-(1-7) on myocardial remodeling, collagen formation, expression of MMP-2 and TIMP-1 in spontaneously hypertensive rats. *Toxicol Lett*, in review.
10. **Roe ND, Thomas DP, and Ren J.** NADPH Oxidase Inhibition Alleviates Diabetes-Induced Myocardial Contractile Dysfunction. *Am J Endo*, (June 5, 2010 submission).
11. **Turdi S, Huff AF, and Ren J.** Deficiency in AMP-activated protein kinase exaggerates high fat diet-induced cardiac hypertrophy and contractile dysfunction. *J Mol Cell Cardiol*, in revision.
12. **Yuan M, Wang HC, Tao L, Zhang HF, and Ren J.** Effects of adrenomedullin on cAMP/cGMP levels and mobilization of calcium in in vitro cultured endothelial cells. *Cardiovasc Toxicol* in review.

### Meeting, Meeting Abstract and Invited Talks

1. **Ceylan Isik AF, Ren J, and Sreejayan N.** The chemical chaperone tauroursodeoxycholic acid alleviates cardiac contractile dysfunction in obesity: Role of endoplasmic reticulum-stress in cardiac functionality. *Experimental Biology*, Anaheim, CA, April 24 - 28, 2010 (**Abstract FASEB J, 24: 575.8, 2010**)
2. **Dolence J, Hua Y, Ren J, and Sreejayan N.** Targeting Cathepsin-K Attenuates Cardiomyocyte Hypertrophy, *CHS Grand-Round*. University of Wyoming, Laramie, WY, April 16, 2010.
3. **Dolence J, Hua Y, Ren J, and Sreejayan N.** Targeting Cathepsin-K Attenuates Cardiomyocyte Hypertrophy, *Wyoming InBRE Meeting*. University of Wyoming, Laramie, WY, March 29-30, 2010.
4. **Du M.** Cellular signaling pathways affecting adipogenesis and marbling of skeletal muscle. *International Congress of Meat Science and Technology (ICOMST)*. Jeju, South Korea, August 16-20, 2010, Keynote speaker for section on "Advanced Technology for Muscle Biology".
5. **Du M.** Maternal nutrition and growth characteristics of farm animals. *American Society of Animal Scientists Annual Meeting*. Denver, Colorado, July 11-14, 2010 (invited speaker for the Reproductive Biology Section).
6. **Du M.** Maternal obesity, inflammation and fetal skeletal muscle development. *Gordon Research Conference on Musculoskeletal Biology and Bioengineering*. Proctor Academy, Andover, NH., August 1-6, 2010 (invited speaker).



## Meeting, Meeting Abstract and Invited Talks

7. **Du M.** Pre-natal muscle development affects beef composition and quality. *American Society of Animal Scientists Annual Meeting*. Denver, Colorado, July 11-14, 2010 (invited Speaker for the Meat Science and Muscle Biology Section).
8. **Ge W, Ma H, Zhang YM, Han X, and Ren J.** Cardiac-specific overexpression of catalase prolongs survival and attenuates paraquat-induced myocardial contractile dysfunction. *Experimental Biology*. Anaheim, CA, April 24 - 28, 2010 (Abstract *FASEB J*, 24: 575.3, 2010).
9. **Ge W and Ren J.** Cardiac glucose metabolism and inflammatory response in adult offspring of nutrient restricted ewes. *Wyoming INBRE Meeting*. University of Wyoming, Laramie, WY, March 29-30, 2010.
10. **Ge W and Ren J.** Cardiac glucose metabolism and inflammatory response in adult offspring of nutrient restricted ewes. *CHS Grand Rounds*. University of Wyoming, Laramie, WY, April 16, 2010.
11. **Guo R and Ren J.** Involvement of AMPK in Alcohol Dehydrogenase (ADH) - Accentuated Myocardial Dysfunction following Acute Ethanol Challenge in Mice. *Wyoming INBRE Meeting*. University of Wyoming, Laramie, WY, March 29-30, 2010.
12. **Guo R, Scott GI, and Ren J.** Involvement of AMPK in Alcohol Dehydrogenase (ADH) - Accentuated Myocardial Dysfunction following Acute Ethanol Challenge in Mice. *CHS Grand Rounds* University of Wyoming, Laramie, WY, April 16, 2010.
13. **Han XF, Nan H, and Ren J.** Impact of Caloric Restriction on Metabolic Status and Myocardial Function in Mice. *CHS Grand Round*, University of Wyoming, Laramie, WY, April 16, 2010.
14. **Han XF, Nan H, and Ren J.** Impact of Caloric Restriction on Metabolic Status and Myocardial Function in Mice. *Wyoming INBRE Meeting*. University of Wyoming, Laramie, WY, March 29-20, 2010.
15. **Hu N and Ren J.** Cardiac-Specific Overexpression of Metallothionein Rescues Nicotine-Induced Cardiac Contractile Dysfunction. *CHS Grand Rounds*. University of Wyoming, Laramie, WY, April 16, 2010.
16. **Hu N and Ren J.** Cardiac-Specific Overexpression of Metallothionein Rescues Nicotine-Induced Cardiac Contractile Dysfunction. *Wyoming INBRE Meeting*. University of Wyoming, Laramie, WY, March 29-20, 2010.
17. **Huang Y, Yan X, Zhu MJ, Ford SP, Nathanielsz PW, and Du M.** Enhanced transforming growth factor  $\beta$  (TGF- $\beta$ ) signaling and fibrogenesis in fetal skeletal muscle of obese sheep at late gestation. *Experimental Biology* Anaheim, CA, April 24-28, 2010.
18. **Kandadi MR, Yu XJ, Hua Y, and Ren J.** Anthrax Lethal Toxin-Induced Cardiomyocyte Contractile Dysfunction: Role of NADPH Oxidase. In: *Wyoming INBRE Meeting*. University of Wyoming, Laramie, WY, March 29-20, 2010.
19. **Koseoglu VK, Wang BL, Ertas N, Gomelsky M, Du M, Means WJ, McCormick RJ, and Zhu MJ.** Identification of genes expressed by *E. coli* O157:H7 during bovine gut colonization. *The 110th General Meeting of the American Society for Microbiology*. San Diego, CA. , May 23-27, 2010.
20. **Ren J.** Acetaldehyde and alcoholic cardiomyopathy – lessons from the ADH and ALDH-2 transgenic models. National Institutes of Health, Bethesda, MD, March 31, 2010 (invited talk).
21. **Ren J.** Cardiac disease in cardiometabolic syndrome: Pathogenesis and protection. *University of California Los Angeles School of Medicine, Los Angeles, CA*, April 30, 2010 (invited).
22. **Ren J.** Cardiac health in cardiometabolic syndrome: Clinical aspects and pathophysiology. Guangzhou Medical College, Guangzhou, China., April 2010 (invited).
23. **Ren J.** Cardiac health in cardiometabolic syndrome: Clinical aspects and pathophysiology. *The 12th South China Conference of Cardiology - International Symposium on Cardiology*. Guangzhou, China., April, 2010 (invited).
24. **Ren J.** Cardiometabolic syndrome and aging. *Beijing Hospital, Ministry of Health, Beijing, China* April, 2010.
25. **Ren J.** Cardiomyopathy in diabetes, obesity and critical care medicine: Pathogenesis and protection. *The Third Military Medical University, Chongqing, China*, April, 2010.
26. **Ren J.** Hypertrophic cardiomyopathy in high-fat diet-induced obesity: role of suppression of forkhead transcription factor and atrophy gene transcription. *Experimental Biology* Anaheim, CA., April 27, 2010 (invited).
27. **Richmond K, Turdi S, and Ren J.** Tauroursodeoxycholic Acid Alleviates High-Fat Diet-Induced Cardiomyocyte Contractile Dysfunction. In: *Wyoming Undergraduate Research Day* University of Wyoming, Laramie, WY, April 24, 2010.

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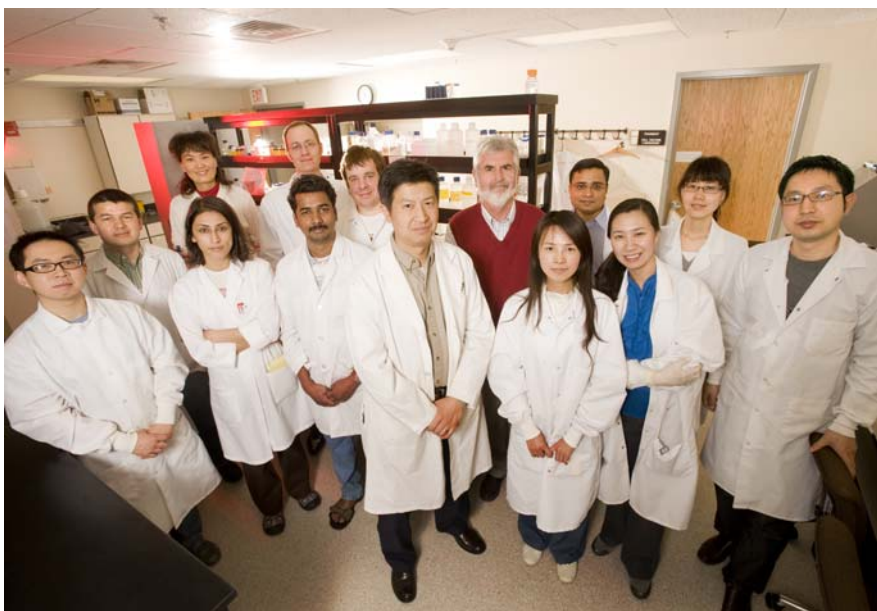
**Dr. Jun Ren and Dr. Min Du presented several guest lectures and key-note speeches from meetings ranging from Experimental Biology to the Gordon Research Conference**

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## Meeting, Meeting Abstract and Invited Talks

28. **Roe ND, Thomas DP, and Ren J.** NADPH Oxidase Inhibition Alleviates Diabetes-Induced Myocardial Contractile Dysfunction. *Experimental Biology*. Anaheim, CA, April 24-28, 2010 (Abstract: *FASEB J.* **24: 597.4, 2010**)
29. **Sreejayan N, Dolence J, Dolence EK, Warriar AK, and Ren J.** Novel Synthetic Chromium (III)-Dinicotino-Cysteinate Complex Augments Insulin Signaling. *CHS Grand Rounds*. University of Wyoming, Laramie WY, April 16, 2010.
30. **Sreejayan N, Dolence J, Dolence EK, Warriar AK, and Ren J.** Novel Synthetic Chromium (III)-Dinicotino-Cysteinate Complex Augments Insulin Signaling. *Wyoming InBRE Meeting*. University of Wyoming, Laramie WY, March 29-30.
31. **Sreejayan N, Hua Y, Kandadi MR, and Ren J.** Cross-talk between Endoplasmic Reticulum Stress, Protein-tyrosine Phosphate-1B and Insulin Signaling Pathways: Potential Targets for Therapeutic Intervention in Type-2 Diabetes. *CHS Grand-Round*. University of Wyoming, Laramie, WY, April 16, 2010.
32. **Sreejayan N, Hua Y, Kandadi MR, and Ren J.** Cross-talk between Endoplasmic Reticulum Stress, Protein-tyrosine Phosphate-1B and Insulin Signaling Pathways: Potential Targets for Therapeutic Intervention in Type-2 Diabetes. *Wyoming InBRE Meeting*. University of Wyoming, Laramie, WY, March 29-30, 2010.
33. **Thompson E, Ceylan Isik AF, Sreejayan N, and Ren J.** The Role of the Apelin Receptors in Obesity-induced Cardiac Dysfunction. *CHS Grand-Round*. University of Wyoming, Laramie, WY, April 16, 2010.
34. **Tong JF, Yan X, Zhao JX, Zhu MJ, Nathanielsz PW, and Du M.** Maternal metformin administration reverses impaired development in offspring skeletal muscle of mice fed a high fat diet. *Society for Gynecologic Investigation Annual Conference*. Orlando, Florida, March 24-27, 2010.
35. **Tousley CB, Long NM, Ford SP, Means WJ, Hess BW, and Du M.** Nutrient restriction from early to mid-gestation in the cow increases adipocyte size of offspring at slaughter. *American Society of Animal Scientists Annual Meeting*. Denver, CO, July 11-15, 2010.
36. **Wang BL, Fang X, Gomelsky M, Du M, Means WJ, McCormick RJ, and Zhu MJ.** A cyclic di-GMP specific phosphodiesterase (PDE) controls virulence gene expression of *E. coli* O157:H7. *The 110th General Meeting of the American Society for Microbiology*. San Diego, CA, , May 23-27, 2010.
37. **Yan X, Zhu MJ, Dey A, Ford SP, Nathanielsz PW, and Du M.** Maternal obesity affects microRNA expression in fetal muscle at mid-gestation. *Experimental Biology*. Anaheim, CA, April 24-28, 2010.
38. **Zhang YM and Ren J.** Akt Plays an Important Role in Lipopolysaccharide-Induced Myocardial Injury and Protection. In: *Experimental Biology*. Anaheim, CA, April 24-28, 2010 (Abstract: *FASEB J.* **24:1036.14, 2010**).
39. **Zhang YM and Ren J.** Septic shock and myocardial function. *Wyoming INBRE Meeting (Oral presentation)*, March 29-30, 2010.
40. **Zhao JX, Zhu MJ, Sreejayan N, and Du M.** AMP-activated protein kinase (AMPK) phosphorylates beta-catenin at Ser 552 and enhances beta-catenin/TCF mediated transcription. *Nuclear Receptors: Development, Physiology and Disease, Keystone Symposia* Keystone, CO., March 21-26, 2010.

**Dr. Jun Ren delivered over 10 lectures on SCI publication in China in April as the editor-in-chief of Medejaden**



Dr. Jun Ren and Dr. Bruce Culver (founding directors of CCRAM) with CCRAM researchers

### Kyle Kaian Xu



Yinan and Xihui welcome their newborn son Kyle Kaian Xu.

## Grants Submitted/Awarded

1. **Sreejayan N.** Targeting Cathepsin-K in Cardiac Hypertrophy: College of Health Sciences, University of Wyoming, Amount: \$7,500, Period 7/1/2010-6/30/2011, funded.
2. **Sreejayan N.** Targeting Cathepsin K to Alleviate Pressure Overload-Induced Cardiac Hypertrophy National Institutes of Health R15, Amount: 357,000, submitted
3. **Yao C, Fox JH, and Ren J.** Cardiac trichinellosis: National Institutes of Health R21, \$393,000, submitted
4. **Ren J.** Unrestricted grant for cardiomyocyte function drug screening from Amgen Incorporation

## Titbits

### UW Undergraduate Research Day



INBRE student researchers Ellen and Kacy from Drs. Sreejayan and Ren's labs with Dr. William Gern, Vice President, Research and Economic Development, University of Wyoming



Dr. Ren with Ms. Heather Talbott, at UW Undergraduate Research day. Heather has a manuscript in revision in *Circulation*.

### AHA Award for Jingying

Jingying Wang former MCLS PhD student who transferred to Buffalo with Dr. Ji Li won the American Heart Association predoctoral fellowship (4.9 percentile). She has already published two seminal papers this year, one equal first author with Heng Ma in *Circulation* (IF 15) and the other in *FASEB J* (IF 7). CCRAM congratulates Jingying on her achievement.

### AJP Editorial Board and NIH Panel

Dr. Ren was elected to the editorial board of the *American Journal of Physiology*. Dr. Ren also served on the NIH Panel: Millennium Promise Award, Women Health in Diabetes PPG.

### Interprofessional Award

Dr. Sreejayan was chosen for the 2010 College of Health Sciences Interprofessional Award.

## CCRAM Newsletter

Center for Cardiovascular Research and Alternative Medicine

University of Wyoming, School of Pharmacy  
 1000 E. University Avenue  
 Laramie, WY 82072  
 Ph: (307)766-6138  
 Email: sreejay@uwyo.edu  
 Url: [http://www.uwyo.edu/pharmacy/info.asp?](http://www.uwyo.edu/pharmacy/info.asp)