

**A. Research Published Papers in 2008-alphabetically by 1st author:**

1. **Ahmadi FA, Grammatopoulos TN, Poczobutt AM, Jones SM, Snell LD, Das M, Zawada WM.** Dopamine selectively sensitizes dopaminergic neurons to rotenone-induced apoptosis. *Neurochem Res* 33, 886-901, 2008 (**IF=1.8**)
2. **Allen DL, Du M.** Comparative functional analysis of the cow and mouse myostatin genes reveals novel regulatory elements in their upstream promoter regions. *Comparative Biochemistry and Physiology*, 150: 432-439, 2008 (**IF=1.391**).
3. **Ceylan-Isik AF, Fliethman RM, Ren J.** Herbal and traditional Chinese medicine for treatment of cardiovascular complications in diabetes mellitus. *Curr. Diab Rev.* 4:320-328, 2008 (**IF=N/A**).
4. **Das M, Burns N, Wilson SJ, Zawada WM, Stenmark KR.** Hypoxia exposure induces the emergence of fibroblasts lacking replication repressor signals of PKC in the pulmonary artery adventitia. *Cardiovasc Res.* 78: 440-448, 2008 (**IF= 6.1**)
5. **Dong F, Ford SP, Nijland MJ, Nathanielsz PW, Ren J.** Influence of maternal undernutrition and overfeeding on cardiac ciliary neurotrophic factor receptor and ventricular size in fetal sheep. *J. Nutri. Biochem.* 19:409-414, 2008 (**IF=3.507**).
6. **Dong F, Kandadi MR, Ren J, Sreejayan N.** Chromium (D-phenylalanine)<sub>3</sub> Supplementation Improves Glucose Disposal, Insulin Signaling and Glut-4 Membrane Translocation in a Dietary Mouse Model of Insulin Resistance, *J. Nutr*, 138:1846-1851, 2008 (**IF=3.771**).
7. **Duan J, Xu HS, Dai S, Wang X, Wu Y, Zhang Y, Sun R, Ren J.** Phytoestrogen  $\alpha$ -zearalanol inhibits homocysteine-induced endothelin-1 expression and oxidative stress in human umbilical vein endothelial cells. *Atherosclerosis* 197:549-555, 2008 (**IF=4.287**).
8. **Fang CX, Dong F, Thomas DP, Ma H, He L, Ren J.** Hypertrophic cardiomyopathy in high fat diet-induced obesity: Role of suppression of Forkhead transcription factor and atrophy gene transcription. *Am. J. Physiol. Heart Circ. Physiol.* 295:H1206-H1215, 2008 (**IF=3.973**).
9. **Forhead AJ, Lamb CA, Franko KL, O'Connor DM, Wooding FBJ, Cripps RL, Ozanne S, Blache D, Shen QW, Du M, Fowden AL.** Role of leptin in the regulation of growth and carbohydrate metabolism in the ovine fetus during late gestation. *Journal of Physiology*, 586: 2393-2403, 2008 (**IF=4.580**).
10. **Gao R, Zhu BH, Tang SB, Wang JF, Ren J.** Scutellarein inhibits hypoxia- and moderately-high glucose-induced proliferation and VEGF expression in human retinal endothelial cells. *Acta Pharmacol. Sin.* 29:707-712, 2008 (**IF=1.667**).
11. **Han B, Tong J, Ma C, Zhu MJ, Du M.** Insulin-like growth factor-1 (IGF-1) and leucine stimulate mammalian target of rapamycin (mTOR) signaling in pig myogenic satellite cells. *Molecular Reproduction and Development* 75: 810-817, 2008 (**IF=2.538**).
12. **Jüngst C, Sreejayan N, Zündt B, Muller I, Spelsberg FW, Hutt TP, Kullak-Ublick GA, del Pozo R, Jüngst D, von Ritter C.** Ursodeoxycholic acid reduces lipid peroxidation and mucin secretagogue activity in gallbladder bile of patients with cholesterol gallstones. *European Journal of Clinical Investigation*, 38: 634-639, 2008 (**IF=2.701**).
13. **Li J, Zhang HF, Wu F, Nan Y, Ma J, Guo WY, Wang HC, Ren J, Das UN, Gao F.** Insulin inhibits TNF- $\alpha$  induction in myocardial ischemia/reperfusion: Role of Akt and eNOS phosphorylation. *Crit. Care Med.* 36:1551-1558, 2008 (**IF=6.283**).

14. **Li LL, Liu XY, Ran JX, Wang Y, Luo X, Wang T, Ren J, Aisha M, Abudurehman R, Xiawudong A, Zhang XC, Mao XM.** Analysis of prevalence and risk factors of hypertension among Uygur adults in Tushala and Hetian of Xinjiang Uygur autonomous region. *Cardiovasc. Toxicol.* 8:87-91,2008 (**IF=1.600**).
15. **Li LL, Ma XL, Ran XJ, Sun XF, Xu LM, Ren J, Mao XM.** Genetic polymorphism of peroxisome proliferator-activated receptor-[gamma]2 pro12Ala on ethnic susceptibility to diabetes in Uygurs, Kazaks and Hans subjects. *Clin. Exp. Pharm. Physiol* 35:187-91, 2008 (**IF=2.308**).
16. **Li Q, Ceylan-Isik AF, Li J, Ren J.** Deficiency of Insulin-Like Growth Factor 1 Reduces Sensitivity to Aging-Associated Cardiomyocyte Dysfunction. *Rejuvenation Research* 11:725-733, 2008 (**IF=4.728**).
17. **Li SY, Ren J.** Cardiac overexpression of alcohol dehydrogenase exacerbates chronic ethanol ingestion-induced myocardial dysfunction and hypertrophy: Role of insulin signaling and ER stress. *J. Mol. Cell. Cardiol.* 44:992-1001, 2008 (**IF=5.246**).
18. **Liu Y, Dolence J, Ren J, Rao MNA, Sreejayan, N.** Inhibitory effect of dehydrozingerone on vascular smooth muscle cell function. *J. Cardiovas. Pharmacol.* 52:422-429, 2008 (**IF=2.203**).
19. **Ma L, Zhu BH, Chen XP, Liu J, Guan YY, Ren J.** Abnormalities of sarcoplasmic reticulum Ca<sup>2+</sup> mobilization in aortic smooth muscle cells from streptozotocin-induced diabetic rats. *Clin. Exp. Pharm. Physiol* 35:568-573, 2008 (**IF=2.038**).
20. **McBride SM, Culver B, Flynn FW.** Dietary sodium manipulation during critical periods in development sensitize adult offspring to amphetamines. *American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology* 295:R899-905, 2008 (**IF=3.661**).
21. **McBride SM, Culver B, Flynn FW.** Early life dietary sodium manipulation cross-sensitizes offspring to amphetamines and increases c-fos expression in the NAc and VTA after amphetamine administration. *American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology*, 2008 (**IF=3.661**).
22. **Miller EJ\*, Li J\*, Leng L, McDonald C, Atsumi T, Bucala R and Young LH.** (\*equal contribution) Macrophage migration inhibitory factor stimulates AMP-activated protein kinase. *Nature* 451:578-582, 2008 (**IF=28.751**).
23. **Ren J, Duan J, Thomas DP, Yang X, Sreejayan N, Sowers JR, Leri A, Kajstura J, Gao F, Anversa P.** IGF-1 alleviates diabetes-induced RhoA activation, eNOS uncoupling and myocardial contractile dysfunction. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 294:R793-802, 2008 (**IF=3.661**).
24. **Ren J, Ma H.** Impaired cardiac function in leptin deficient mice. *Curr. Hypertension Report.* 10:448-453, 2008 (**IF=1.403**).
25. **Ren J, Privratsky JR, Yang X, Dong F, Carlson EC.** Metallothionein alleviates glutathione depletion-induced oxidative cardiomyopathy in murine hearts. *Crit. Care Med.* 36:2106-2116, 2008 (**IF=6.283**).
26. **Ren J, Wold LE.** Mechanisms of alcoholic heart disease. *Therapeutic Advances in Cardiovascular Disease* 2:497-506, 2008 (**IF=N/A**).
27. **Ren J, Zhu BH, Relling DP, Esberg LB, Ceylan-Isik AF.** High fat diet-induced obesity leads to resistance to leptin-induced cardiomyocyte contractile response. *Obesity* 16:2417-2423, 2008 (**IF=3.115**).
28. **Ren J.** Leptin and cardiac dysfunction in obesity. *Clin Med Tribune* 34:C5, 2008 (**IF=N/A**).
29. **Ren J. Wang YJ.** One world, one mission – 2007 American Heart Scientific Session. *New Drug Invest. Tribune* 44: 7-8, 2008 (**IF=N/A**).
30. **Ren J.** Wide spectrum of presentation and variable mechanisms of compromised cardiac function in multiple organ dysfunction syndrome. *J Organ Dysfunction* 4: 239-248, 2008 (**IF=N/A**).
31. **Shen QW, Gerrard DE, Du M.** Compound C, an inhibitor of AMP-activated protein kinase, inhibits glycolysis in mouse *longissimus dorsi* postmortem. *Meat Science*, 78: 323-330, 2008 (**IF=2.006**).
32. **Sreejayan N, Dong F, Kandadi MR, Yang X, Ren J.** Chromium Improves Glucose Intolerance, Insulin Resistance and Hepatic ER Stress in Obese Mice. *Obesity* 16:1331-1337, 2008 (**IF=3.115**).

33. **Sreejayan N, Yang X, Palanichamy K, Dolence D, Ren J.** Antioxidant properties of argpyrimidine. *Eur. J. Pharmacol*, 593:30-35, 2008 (**IF=2.376**).
34. **Sun JB, Duan JH, Dai SL, Ren J, Guo L, Jiang W, Li Y.** Preparation and anti-tumor efficiency evaluation of doxorubicin-loaded bacterial magnetosomes, the magnetic nanoparticles as drug carriers isolated from *Magnetospirillum Gryphiswaldense*. *Biotechnol Bioengineering* 101:1313-1320, 2008 (**IF=3.037**).
35. **Tao YC, Ma XM, Xie Z, Ran X, Wang Y, Luo X, Hu M, Gen W, Zhang M, Wang T, Ren J, Li LL.** The prevalence of type 2 diabetes and hypertension in Uygur and Kazak populations. *Cardiovasc. Toxicol.* 8:155-159, 2008 (**IF=1.600**).
36. **Tong J\*, Zhu MJ,\* Underwood KR, Hess BW, Ford SP, Du M.** (\*equal contribution) AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3 cells. *Journal of Animal Science*, 86: 1296-1305, 2008 (**IF=2.102**).
37. **Turdi S, Xu P, Li Q, Shen Y, Kerram P, Ren J.** Amidization of doxorubicin alleviates doxorubicin-induced contractile dysfunction and decreased survival in murine cardiomyocytes. *Toxicol. Lett.* 178:197-201, 2008 (**IF=2.826**).
38. **Underwood KR, Means WJ, Du M.** Caspase 3 is not involved in the postmortem tenderization of beef. *Journal of Animal Science*, 86: 960-966, 2008 (**IF=2.102**).
39. **Underwood KR, Means WJ, Zhu MJ, Ford SP, Hess BW, Du M.** AMP-activated protein kinase is negatively associated with intramuscular fat content in *longissimus dorsi* muscle of beef cattle. *Meat Science*, 79: 394-402, 2008 (**IF=2.006**).
40. **Xu H, Duan J, Dai S, Wu Y, Sun R, Ren J.**  $\alpha$ -Zearalanol attenuates oxLDL-induced ET-1 gene expression, ET-1 secretion and redox-sensitive intracellular signaling activation in human umbilical vein endothelial cells. *Toxicol. Lett.* 179:163-168, 2008 (**IF=2.826**).
41. **Xu H, Duan J, Wang W, Dai S, Wu Y, Sun R, Ren J.** Reactive oxygen species mediate oxidized LDL-induced endothelin-1 gene expression via extracellular signal-regulated kinase (ERK) pathway in vascular endothelial cells. *J. Hypertens.* 26:956-963, 2008 (**IF=4.364**).
42. **Xu PS, Li SY, Li Q, Van Kirk EA, Ren J, Zhang Z, Radosz M, Murdoch WJ, Shen Y.** Virion-mimicking nanocapsules from pH-controlled hierarchical self-assembly for gene delivery. *Angew Chem. Int. Edit.* 47: 1260-1264, 2008 (**IF=10.031**).
43. **Zhao P, Su G, Xiao XY, Hao E, Zhu XL, Ren J.** Chinese medicinal herb Radix Astragali suppresses cardiac contractile dysfunction and inflammation in a rat model of autoimmune myocarditis. *Toxicol. Lett.* 182:29-35 (**IF=2.826**).
44. **Zhao P, Xiao X, Kim A, Leite MF, Xu J, Zhu X, Ren J, Li J.** c-Jun inhibits thapsigargin-induced ER stress through up-regulation of DSCR1/Adapt78. *Exp Biol Med* 233:1289-1300, 2008 (**IF=1.979**).
45. **Zhu MJ, Mendonca A, Ismail HA, Ahn DU.** Effects of irradiation on survival and growth of *Listeria monocytogenes* and natural microflora in vacuum-packaged turkey hams and breast rolls. *Poultry Science*, 87: 2140-2145, 2008 (**IF=1.603**).
46. **Zhu MJ, Han B, Tong J, Ma C, Kimzey JM, Underwood KR, Ford SP, Nathanielsz PW, Du M.** AMP-activated protein kinase signaling pathways are down-regulated and skeletal muscle development impaired in fetuses of obese, overnourished sheep. *Journal of Physiology*, 586: 2651-2664, 2008 (**IF=4.580**).

## **B. Book and Book Chapters- alphabetically by 1st author:**

1. **Du M, Zhu MJ.** Developmental programming of fetal skeletal muscle by maternal nutrition. In “*Developmental Programming of Diabetes and Metabolic Syndrome*”, Page 85-102. Edited by Marlon E. Cerf. Transworld Research Network **2 points (non competitive)**

### C. Meeting Presentations/Invited Lectures in 2008- alphabetically by 1st author:

1. **Brewer KM, Leuvano FJ, Du M, Yan X, Tong J, Zhu MJ.** Effects of maternal obesity on mucosal immune system development. Summary Research Apprentice Program, NSF EPSCOR. Laramie, July 25, WY, 2008 **2 points (non-competitive)**
2. **Culver B:** “*Involvement of Neuroinflammation in Models of Neurodegeneration*” Shandong University; Jinan, China, October, 2008 **2 points (non-competitive)**
3. **Culver B:** “*Involvement of neuroinflammation and cyclooxygenase in chronic methamphetamine abuse associated neurotoxicity*” Beijing Joint Conference of Physiological Sciences 2008 which will be held in Beijing, China from October 19-22, 2008 **2 points (non-competitive)**
4. **Das M, Shields KM, Burns N, Harral J, Homma N, Oka M, West J.** Deficiency of MAP Kinase Phosphatase-1 Induces Development of Pulmonary Hypertension in Mice. EB 2008, April 5-9, San Diego, California **2 points (non-competitive)**
5. **Forhead AJ, Shen QW, Du M, Fowden AL.** Cortisol suppresses the anabolic signalling proteins, p-mTOR and p-S6 kinase, in skeletal muscle of fetal sheep near term. The Physiological Society Annual Meeting, University of Cambridge, UK, July 14-16, 2008. **2 points (non-competitive)**
6. **Hua Y, Ren J, Sreejayan N.** Ursodeoxycholic acid attenuates LDL-uptake in macrophages. *American Heart Association Basic Cardiovascular Sciences Conference 2008. Heart Failure: Molecular Mechanisms and Therapeutic Targets*, Keystone, Colorado, July 4-8, 2008 **2 points (non-competitive)**
7. **Kimzey JM, Du M.** Development of AMP-activated protein kinase fluorescence constructs for monitoring pluripotential cell differentiation. Graduate Student Symposium, Laramie, WY, April 2-3, 2008 **2 points (non-competitive)**
8. **Kimzey JM, McCormick RJ, Stayton MM, Du M.** Development of AMP-activated protein kinase fluorescence constructs for monitoring pluripotential cell differentiation. Western Section of ASAS Annual Meeting, Laramie, WY, June 24-26, 2008 **2 points (non-competitive)**
9. **Leuvano FL, Brewer KM, Tong J, Kimzey JM, Du M.** Metformin increases offspring skeletal muscle growth from maternal obese mice. Summary Research Apprentice Program, NSF EPSCOR. Laramie, July 25, WY, 2008 **2 points (non-competitive)**
10. **Li J, Kim AS, Cheng H, Hu X, Miller EJ, Wu X, Xiao L, Young LH.** AMPK mediates the cardioprotective effect of urocortin. *Circulation* 118: S433, 2008 **8 points (competitive-Oral)**
11. **Li J.** Aging-associated impairment in the activation of AMP-activated protein kinase in the ischemic heart. *The Gerontologist* 48 (supplement): 185, 2008 **2 points (non-competitive)**
12. **Li J, Kim AS, Cheng H, Hu X, Miller EJ, Wu X, Sherwin RS, Xiao L, Young LH.** AMP-activated protein kinase mediates the cardioprotective effects of Urocortin via augment glucose transport during myocardial ischemia. *Diabetes* 57 (supplement): A403-A404, 2008 **5 points (competitive-poster)**
13. **Li J.** Signaling pathways in the ischemic hearts. *Chinese Pharmacologist* 25:22-24, 2008 **2 points (non-competitive)**
14. **Li J, Haynes NA, Geringer M, Wen L, Young LH, Li J.** Toll-like receptor 4-deficiency limits ischemic injury via up-regulation of AMPK and down-regulation of p38 MAPK. *Diabetes* 57 (supplement): A426-A426, 2008 **5 points (competitive-poster)**
15. **Li J:** “*The Cardioprotective Effect of AMPK on Ischemic Injury*”, University at Buffalo, Buffalo, NY, December 2008 **N/A**
16. **Li J:** “*Aging-associated impairment in the activation of AMP-activated protein kinase in the ischemic heart*”, 61<sup>st</sup> Annual Scientific Meeting, Washington DC, MD, November 2008 **N/A**
17. **Li J:** “*AMP-activated Protein Kinase: A Novel Target for Protection against Ischemic Injury*”, University of Arkansas Medical School, Little Rock, AR, October 2008 **N/A**

18. **Li J:** “*MKP-1 and AMPK: Targets for Inflammatory and Ischemic Heart Disease*”, The Keynote speaker of UW INBRE retreat, Yellowstone, WY, September 2008 **N/A**
19. **Li J:** “*MAPK and AMPK: Critical Mediators of the Cellular Stress Response*”, Institute of Biochemistry and Cell Biology, SIBS, CAS, Shanghai, China, July 2008 **N/A**
20. **Li J:** “*AMPK: Mediator of the Cardioprotective Effects of MIF and Urocortin*”, Uniformed Service University, Bethesda, MD, June 2008 **N/A**
21. **Li J:** “*The Cellular Fuel Gauge-AMPK in the Heart*”, Saint Louis University, Saint Louis, MO, April 2008 **N/A**
22. **Li J:** “*Regulation of AMP-activated Protein Kinase in the Ischemic Heart*”, Department of Molecular Biology, University of Wyoming, Laramie, WY, February 2008 **N/A**
23. **Li Q, Thomas DP, Ren J.** Intramyocardial delivery of mesenchymal stem cell ameliorates the function of cardiomyocytes from area at risk after myocardial infarction. *AAPS annual meeting* 2008, Nov. 16-20, Atlanta, GA **2 points (non-competitive)**
24. **Ma H, Xu P, Shen Y, Ren J.** Cisplatin compromises the ultrastructure of mitochondria and mechanical function of cardiomyocytes. 2008 NISBRE, Washington DC, August 6-8, 2008 **2 points (non-competitive)**
25. **Ma H, Wang J, Wu J, Zhao P, Li Q, Gao X, Ren J, Li J.** A novel AMPK activator from Chinese herb medicine and ischemia phosphorylate the cardiac transcription factor FOXO3. *Chinese Pharmacologist* 25:52-54, 2008 **N/A**
26. **Okamoto M, Poczobutt AM, Zawada WM, Das M.** Hypoxia-induced Proliferation of Human Lung Cancer Cells is Regulated by an Autocrine Growth Factor, Midkine: Role of PKC $\delta$  Pathway. 2008 Molecular, Cellular, Physiological, and Pathogenic Responses to Hypoxia, Keystone Symposia. January 15-20<sup>th</sup>, Vancouver, British Columbia **2 points (non-competitive)**
27. **Ren J:** “*Cardiac dysfunction in cardiometabolic syndrome*”, University of British Columbia Faculty of Pharmacy, Vancouver, Canada, March 2008 **N/A**
28. **Ren J:** “*Wyoming Biomedical research Excellence*”, US Congressional Event on IDEa Program, the Capital Hill, Washington, D.C., June 2008 **N/A**
29. **Shields KM, Burns N, Harral J, Homma N, Oka M, West J, Das M.** Deficiency of MAP Kinase Phosphatase-1, a Critical Inflammatory Modulator, Induces Development of Pulmonary Hypertension in Mice. 2008 Western Student Medical Research Forum. January 30-February 2, Carmel, California **2 points (non-competitive)**
30. **Sreejayan N, Dong F, Zhao P, Ren J, Du M.** Novel chromium complex inhibits skeletal muscle atrophy and whole body glucose intolerance associated with hindlimb suspension. College of Health Sciences 14<sup>th</sup> Annual Research Day Presentation, Laramie, WY, April 4<sup>th</sup>, 2008 **2 points (non-competitive)**
31. **Tong J, Du M.** AMP-Activated Protein Kinase (AMPK) Mediates Phosphorylation of Forkhead Protein (FOXO) Independent of Insulin-Like Growth Factor-1 (IGF-1)/PKB Pathway in C2C12 Myotubes. Graduate Student Symposium, Laramie, WY, April 2-3, 2008 **2 points (non-competitive)**
32. **Tong J, Underwood KR, Yan X, Zhu MJ, Du M.** AMP-Activated Protein Kinase (AMPK) Mediates Phosphorylation of Forkhead Protein (FOXO) Independent of Insulin-Like Growth Factor-1 (IGF-1)/PKB Pathway in C2C12 Myotubes. Western Section of ASAS Annual Meeting, Laramie, WY, June 24-26, 2008 **2 points (non-competitive)**
33. **Tong J, Underwood KR, Yan X, Zhu MJ, Du M.** AMP-activated protein kinase (AMPK) and insulin-like growth factor-1 (IGF-1) on expression of muscle-specific ubiquitin ligases in C2C12 myotubes. The 2008 Joint ADSA-ASAS Annual Meeting, Indianapolis, IN, July 7-11, 2008 **2 points (non-competitive)**
34. **Turdi S, Yan X, Ren J.** High fat-diet induced cardiomyocyte dysfunction in AMPK-deficient mice. *Circulation* 118: S376, 2008 **5 points (competitive-poster)**
35. **Underwood KR, Du M.** Gestational nutrition affects growth and adipose tissue deposition in steers. Graduate Student Symposium, Laramie, WY, April 2-3, 2008 **2 points (non-competitive)**

36. **Underwood KR, Kimzey JM, Tong J, Price PL, Grings EE, Hess BW, Means WJ, Du M.** Gestational nutrition affects growth and adipose tissue deposition in steers. Western Section of ASAS Annual Meeting, Laramie, WY, June 24-26, 2008 **2 points (non-competitive)**
37. **Underwood KR, Tong J, Zhu MJ, Means WJ, Du M.** Myostatin is associated with marbling in beef cattle. The 2008 Joint ADSA-ASAS Annual Meeting, Indianapolis, IN, July 7-11, 2008 **2 points (non-competitive)**
38. **Wang J, Ma H, Ren J, Li J.** Ischemia and AMPK activator phosphorylate the cardiac transcription factor FOXO3. *National IDeA Symposium of Biomedical Research Excellence (NISBRE)*, Washington DC, August 6-8, 2008 **2 points (non-competitive)**
39. **Yang X, Liu L, Yang SX, Du M, France J, Fan MZ.** Contributions of hormonal factors to the mammalian target of rapamycin (mTOR)-mediated and mTOR-independent postnatal decreases in skeletal muscle protein synthesis. Canadian Society of Animal Science, Guelph, Ontario, Aug. 11-14, 2008 **2 points (non-competitive)**
40. **Zhao P, Xiao X, Kim AS, Leite MF, Xu J, Zhu X, Ren J, Li J.** c-Jun inhibits ER-stress through up-regulation of down syndrome critical region 1 (DSCR1)/Adapt78. *Diabetes* 57 (supplement): A533-A534, 2008 **2 points (competitive)**
41. **Zhao P, Xiao Y, Nair S, Ren J and Li J.** A Newly synthetic chromium complex –chromium (D-phenylalanine)<sub>3</sub> stimulates glucose transport via activation of AMP-activated protein kinase. *Diabetes* 57 (supplement): A759-A759, 2008 **5 points (competitive-poster)**
42. **Zhao P, Wang J, He L, Ma H, Li J, Zhu X, Ren J, Li J.** Toll-like receptor 4-deficiency improves ischemic cardiomyocytes contractile dysfunction via augmentation of AMPK activation. *Circulation* 118: S277, 2008 **5 points (competitive-poster)**
43. **Zhao P, Su G, Hao E, Xiao X, Zhu X, Ma H, Ren J, Li J.** Radix astragali suppresses myocardial inflammation and improves cardiac function in autoimmune myocarditis rats. *Chinese Pharmacologist* 25:60-62, 2008 **N/A**
44. **Zhu MJ, Strable MS, Brenna JT, Du M, Hess BW, Moss GE, Nathanielsz PW, Ford SP.** Maternal obesity and overnutrition increase placental fatty acid (FA) transport. *Society for Gynecologic Investigation*, San Diego, CA, March 26-29, 2008 **2 points (non-competitive)**
45. **Zhu MJ, Wu G, Du M, Hess BW, Moss GE, Nathanielsz PW, Ford SP.** Maternal obesity and over-nutrition down-regulates system A amino acid (AA) transporter 2 (SNAT2) in ewe placentomes. *Society for Gynecologic Investigation*, San Diego, CA, March 26-29, 2008 **2 points (non-competitive)**
46. **Zawada WM, Banninger GP, Jones S, Thornton J, Marriott B, Cantu D, Rachubinski A, Poczobutt A, Das M.** Non-phagocytic NADPH oxidase is present in dopaminergic neurons. EB 2008, April 5-9, San Diego, California **2 points (non-competitive)**

#### **D. Awarded Ph.D. in Neuroscience:**

**Xiaochun (Susan) Zhang** (advisor **Bruce Culver**)

**Current Position:** Research Scientist for PrognostiX, Inc.; 10625 Carnegie Ave., Cleveland, OH 44106

**Thesis:** “*Involvement of Neuroinflammation In Models Of Neurodegeneration*”, Ph.D., Graduate Neuroscience Program. Department of Zoology and Physiology, Aug, 2008

#### **E. Research Proposals Awarded in 2008-alphabetically by 1st author:**

**Das M:** 2R01 HL64917-01A1 - NHLBI Title: PKC Isozymes in Hypoxia-Induced Fibroblast Proliferation. \$223,894 (2006-2009) **20 points**

**Driscoll M:** WWAMI medical student, was awarded a grant to conduct research entitled “*The effects of omega-3 fatty acids and saturated fats on the accumulation of  $\beta$ -amyloid in an Alzheimer’s disease mouse model*” in **Dr. Culver’s** Lab. Meghan received a \$4500 stipend through the MSRP (Medical Student Research Training Program) from the University of Washington Medical Center to conduct research in Dr. Culver’s lab 2008 summer. **5 points**

- Du M:** *NIH*. (1R03HD057506) A novel model for studying fetal muscle development. \$143,000 (2/08-01/10) **14 points**
- Du M, Zhu MJ, Means WJ.** *USDA-NRI*. (2008-35206-18826). Superior growth performance of RN pigs: role of AMP-activated protein kinase. \$299,625 (02/08-01/11) **30 points**
- Hess BW, Du M, Rule DC, McCormick RJ, Ford SP.** *UW-AES Special Equipment Grant*. Purchase of RT-PCR instrument for Animal Science. \$20,338 **5 points**
- Li J:** American Heart Association National SDG Program: Aging-associated alterations in heart stress signaling during ischemia/reperfusion. (PI), \$308,000 (7/1/08-6/30/12) **30 points**
- Li J:** American Heart Association Pacific Mountain Affiliate: Alterations in AMP-activated protein kinase signaling pathway during ischemia with aging. (PI), \$132,000 (7/1/08-6/30/10) Relinquish due to overlap with AHA SDG. **N/A**
- Li J:** NIH 1R03AG-028163: Alterations in heart stress signaling during ischemia. (PI), \$117,200 (4/1/08-3/30/10) **12 points**
- Li J:** American Federation for Aging Research (AFAR) A08007: Alterations in AMP-activated protein kinase signaling during ischemia with aging. (PI), \$60,000 (7/1/08-6/30/10) **6 points**
- Li J:** NIH UW INBRE Pilot Grants: Aging-associated alterations in cardiac MIF-AMPK signaling during ischemia/reperfusion. \$25,000 (5/1/08-4/30/09) **6 points**
- Luhurs K:** (supervisor: Dr. Bruce Culver) NSF/EPSCoR Undergraduate Research Fellowships: “The Effects of a Nuclear Factor-Kappa B Inhibitor on the Cerebral Amyloid Burden in a Transgenic Mouse Model of Alzheimer’s Disease”, \$3,000 (2008-2009) **5 points**
- Malik W:** (supervisor: Dr. Bruce Culver) NSF/EPSCoR Undergraduate Research Fellowships: “Effects of a Diet High in Saturated Fat and Total Fat on Inflammatory Markers and Amyloid Plaque Accumulation in a Transgenic Mouse Model of Alzheimer’s Disease”, \$4,500 (2008-2009) **5 points**
- Ren J:** American Diabetes Association: eNOS uncoupling in diabetic cardiomyopathy: mechanisms, consequences and therapeutics, PI, \$300,000 (7/1/2008-6/30/2011) **30 points**
- Ren J:** Natural Science Foundation of China (NSFC), key laboratory establishment in Xinjiang, Platform for selection of anti-diabetic drugs. (PI), YMB 50,000 (1/1/09-12/31/10) **5 points**
- Rule DC, Du M, Cammack KM, Moss GE.** *Graduate School Recruitment Initiative, UW*. Graduate student recruitment proposal. \$3,000 (07/07-08/08) **5 points**
- Ryff K:** (supervisor: Dr. Bruce Culver) NSF/EPSCoR Undergraduate Research Fellowships: “Dietary and Antiinflammatory Approaches to Alter Function and Amyloid Plaque Accumulation in a Transgenic Mouse Model of Alzheimer’s Disease”, \$3,000 (2008-2009) **5 points**
- Turdi S:** The College of Health Science Research Grant. \$1,100, May, 2008 **5 points**
- Kyla Jones, Emily Byra:** Wyoming Space Grant Consortium Grants, study cardiac deconditioning. \$5,000 (Faculty sponsor: Jun Ren) **10 points**
- Zhu MJ:** R. J. McCormick, W. J. Means, S. I. Paisley, M. Du. *USDA-China Scientific cooperation exchange travel grant*. Antibiotics as feed supplement in beef cattle and safety of beef. (06/01/08~07/31/09) **N/A**
- Zhu MJ:** *NIH, University of Wyoming Northern Rockies Regional INBRE*, (5P20RR016474 Pilot). Maternal obesity, inflammation and epigenetic modifications in fetal intestine. \$25,000. (05/01/2008-04/30/2009) **6 points**
- Zhu MJ:** *USDA-NRI*. AMP-activated protein kinase and glucose transporters in sheep placentomes. \$99,862. 07/01/08-06/30/10 **10 points**