

1. SUMMARY OF THE PROFESSIONAL ACTIVITIES (October – December 2004)**Paper accepted in October – December 2004**

- Dai S, Duan J, Lu Y, Cheng J, Ren J, Deng W, Wu Y. α -Zearalanol, a phytoestrogen for cardiovascular therapy. *Endocrine* in press
- Dong F, Esberg LB, Roughead ZK, Ren J, Saari JT. Dietary copper deficiency enhances cardiac sensitivity to insulin-like growth factor-I. *Am J Physiol: Heart Circ Physiol* (acceptance pending minor revision).
- Dong F, Zhang X, Wold LE, Ren Q, Zhang Z, Ren J. Endothelin-1 enhances oxidative stress, cell proliferation and reduces apoptosis in human umbilical vein endothelial cells: Role of ET_B receptor, NADPH oxidase and caveolin-1. *Br. J. Pharmacol.* in press.
- Ren J, Ceylan-Isik AF. Diabetic cardiomyopathy: Do women differ from men. *Endocrine* in press.
- Ren J, Fang XC. Small guanine nucleotide-binding protein Rho and myocardial function (invited review). *Acta Pharmacologica Sinica* in press.
- Xu HS, Duan J, Dai S, Wu YQ, Sun RY, Ren J. Phytoestrogen α -Zearalanol antagonizes oxidized LDL-induced inhibition of nitric oxide production and stimulation of endothelin-1 release in human umbilical vein endothelial cells. *Endocrine* in press.
- Xu P, Tang H, Li SY, Ren J, Van Kirk E, Murdoch WJ, Radosz M, Shen Y. Enhanced stability of core-surface cross-linked micelles fabricated from Amphiphilic brush copolymers. *Biomacromolecules* 5: 1736-1744, 2004
- Zhang X, Dong F, Ren J, Driscoll MJ, Culver B. High dietary fat induces NADPH oxidase-associated oxidative stress and inflammation in rat cerebral cortex. *Exp. Neurol.* in press.

Manuscript submitted in October – December 2004

- Dong F, Ford SP, Fang XC, Nijland MJ, Nathanielsz PW, Ren J. Intrauterine nutrition deficiency during early to mid gestation up-regulates cardiac insulin-like growth factor (IGF) receptors associated with ventricular hypertrophy in fetal sheep. *Biol. Reprod.* in revision
- Fang CX, Dong F, Ren BH, Epstein PN, Ren J. Metallothionein alleviates insulin resistance-induced cardiac contractile dysfunction: Role of Akt phosphorylation, PTB1B and PPAR γ . *Diabetologia* in review.
- Li SY*, Fang CX*, Aberle NS II*, Ren BH, Ceylan-Isik AF, Ren J. Inhibition of PI-3 kinase/Akt/mTOR but not calcineurin signaling reverses insulin-like growth factor I-induced protection against glucose toxicity in cardiomyocyte contractile function. *Cardiovasc. Res.* in review (*equal first authorship).
- Relling DP, Esberg LB, Johnson WT, Murphy EJ, Carlson EC, Saari JT, Ren J. High fat diet depresses cardiac contractile function in isolated ventricular myocytes in the absence of oxidative and lipotoxic damage. *Hypertension* in review.
- Yang X, Palanichamy K, Ontko AC, Rao MNA, Fang CX, Ren J, Sreejayan N. A newly synthetic chromium complex - chromium (phenylalanine)₃ improves insulin responsiveness and reduces whole body glucose tolerance. *FEBS Lett*
- Yang X, Sreejayan N, Ren J. Cardiac senescence and ventricular dysfunction (review). *Endocrine*

Meeting abstract submitted in October – December 2004

For 2005 Experimental Biology meeting in San Diego, CA:

- Saari JT, Dong F, Esberg LB, Roughead ZK, Ren J. Increased contractility is associated with increased cardiac IGF-I receptor protein in copper-deficient cardiomyocytes. Experimental Biology 2005.
- Wu S, Li Q, Li SY, Du M, Ren BH, Aberle NS, II, Epstein PN, Ren J. Cardiac overexpression of antioxidant catalase prevents aging-induced cardiac diastolic contractile dysfunction, protein damage and proteomic alterations. Experimental Biology 2005
- Fang CX, Dong F, Ren BH, Epstein PN, Ren J. Metallothionein alleviates insulin resistance-induced cardiac contractile dysfunction: Role of Akt, PTB1B and PPAR γ . Experimental Biology 2005.

Proposal submitted and funded: None.

Meeting presentations: Bruce and Susan presented 2 posters at the Neuroscience meeting in October (San Diego, CA).

2. LABORATORY ISSUES, NOTE & OTHER BUSINESS:

1. Dave Bruch award Spring 2005 NSF EPSCoR Undergraduate Research Fellowship.
2. Dr. Culver's lab will be in charge of maintenance the Kodak Film Developer from 1/1 to 6/30. The maintenance time will be every first Monday of each month. Otherwise, Susan will let you guys know in advance.
3. Please take special care of our equipments. Although it is still under warrantee, the diagnosis of our sonicator came back from the vendor with "careless use and human damage". It costs \$500 to repair it (not covered with warrantee).
4. CRAM Research Award will begin twice a year (July 1st and January 1st), \$200 award. Details will follow.

Merry Christmas and Happy Holidays!!!