

BIOGRAPHICAL SKETCH

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NAME Xia, Huijing	POSITION TITLE Instructor		
eRA COMMONS USER NAME (credential, e.g., agency login) HUIJING			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Jiangxi University of Traditional Chinese Medicine, Nanchang, China	B.S.	07/96	Traditional Chinese Medicine
Jiangxi University of Traditional Chinese Medicine, Nanchang, China	M.S.	07/01	Traditional Chinese Medicine
China Pharmaceutical University, Nanjing, China.	Ph.D.	06/06	Cardiovascular Pharmacology
Louisiana State University, New Orleans, LA, USA	Postdoctoral	12/06-06/11	Physiological Genomics

A. Personal Statement

For the past 10 years, my research interests have been in the area of cardiovascular diseases. During my post-doctoral training I studied the central neural mechanisms regulating blood pressure. In July 2011, I was promoted to an Instructor in the Department of Pharmacology at LSUHSC. Since this time I have also participated as Core Manager for the COBRE Vascular and Cardiac Function core. More recently, I have initiated an independent research line on the central regulation of metabolism. Obesity and diabetes are major metabolic disorders and risk factors for cardiovascular diseases. The mechanisms involved in the development of metabolic disorders are very complex. My research focuses on addressing the central mechanisms on controlling metabolism, with a particular emphasis on the newly identified enzyme ACE2. In this project, I will use transgenic mice and physiological/molecular techniques to study the interaction between ACE2 and the peptide apelin in the control and potential treatment of metabolic disorders that occur in cardiovascular disease states.

B. Positions and Honors

Positions

Jul, 1996 - Aug, 1998 Teaching assistant

Department of Pharmacy, Jiangxi University of Traditional Chinese Medicine

Jul, 2001 - Aug, 2003 Lecturer

Department of Pharmacy, Jiangxi University of Traditional Chinese Medicine

Dec, 2006 - Jun, 2011 Postdoctoral Researcher

Louisiana State University Health Sciences Center- School of Medicine Department of Pharmacology & Experimental Therapeutics

Jul, 2011- present Instructor

Professional memberships

- Member of the Chinese Pharmacological Society since 2005
- Member of the American Physiological Society since 2007
- Member of the American Heart Association since 2007
- Member of the American Autonomic Society since 2010
- Member of the Inter-American Society of Hypertension since 2011

Honors

- 2008 Caroline Tum Suden/Frances A. Hellebrandt Professional Opportunity Award from The American Physiological Society
- 2008 Van Harreveld Memorial Award from The American Physiological Society CNS section
- 2008 Travel Award from The American Physiological Society for the Beijing Joint Conference of Physiological Sciences 2008
- 2008 New Investigator Travel Award from The American Heart Association for 62nd High Blood Pressure Research Conference 2008
- 2009 Travel Award from The American Physiological Society for Professional Skills Training Courses (Writing and Reviewing for Scientific Journals)
- 2009 Research Recognition Award from The American Physiological Society CNS section
- 2009 Travel Award from the LSUHSC Neuroscience Center
- 2009 Postdoctoral Fellowship in Physiological Genomics from The American Physiological Society (2009-2011)
- 2009 Travel Fellowship Award from The American Autonomic Society for the 20th International Symposium on the Autonomic Nervous System
- 2010 Poster Award from FESEB at the 2010 Summer Research Conference Neural Mechanisms in Cardiovascular Regulation
- 2010 New Investigator Award from The American Heart Association at the 64th High Blood Pressure Research Conference 2010
- 2011 New Investigator Award from The Inter-American Society of Hypertension at the Joint Meeting of the 65th High Blood Pressure Research Conference/Inter-American Society of Hypertension 2011
- 2011 Presentation Award from The International Society of Hypertension at the the Joint Meeting of the 65th High Blood Pressure Research Conference/Inter-American Society of Hypertension 2011
- 2012 Research Recognition Award from The American Physiological Society NCAR section
- 2013 Co-chair & Invited Speaker for Featured Topic “Brain Renin-Angiotensin signaling in metabolic diseases” at Experimental Biology meeting 2013.
- 2014-2015 Member of the Award Committee of The American Physiological Society

C. Peer-Reviewed Publications:

1. Zhou L., Xia H. [Chinese traditional drugs regulate the expression of interleukin-2](#). *Journal of Jiangxi College of Traditional Chinese Medicine* 1999;11(1):16-17
2. Shao S., Xia H. [The manufacturing method of Bag-soaks](#). *Journal of Jiangxi College of Traditional Chinese Medicine*. 1999;11(4):180-181

3. Xia H., Luo Y., Zeng A. [Study on the Content Determination of Isofraxindin from Root, Stem and Leaf of Sarcandra Glabra](#). *Journal of Jiangxi College of Traditional Chinese Medicine*. 2002;14(3): 9-10
4. Fan P., Gong Y., Xia H., Fan H., Sun Q. [The necessity of pharmaceutical care in China](#). *Science and Technique Ground*. 2004;10:112-113
5. Li S., Xia H., Kang L., Luo Y. [Determination of isofraxidin and flavonoids in Sarcandra glabra \(Thunb.\) Nakai](#). *Central South Pharmacy*. 2005;3(6):327-329
6. Xia H., Dai D., Dai Y. [Up-regulated inflammatory factors endothelin, NF \$\kappa\$ B, TNF \$\alpha\$ and iNOS involved in exaggerated cardiac arrhythmias in L-thyroxine-induced cardiomyopathy are suppressed by darusentan in rats](#). *Life Sciences*. 2006;79(19):1812-1819
7. Xia H., Wan M., Dai D., Ji M., Guo F. [Affinity and selectivity of darusentan for rat endothelin receptors and effects of once iv administration of darusentan on hypoxia-induced pulmonary hypertensive rats](#). *Chinese Journal of Clinical Pharmacology and Therapy*. 2006; 11(3):261-265
8. Xia H., Dai D., Ji M., Wang S., Du T., Tang X. [Affinity and selectivity of compound III 21, a novel nonpeptide endothelin antagonist for rat ET_A and ET_B receptors](#). *Chinese Journal of New Drugs*. 2006;15(14):1157-1160
9. Qi M., Xia H., Dai D. [A novel endothelin receptor antagonist CPU0213 improves diabetic cardiac insufficiency attributed to up-regulation of the expression of FKBP12.6, SERCA2a and PLB in rats](#). *Journal of Cardiovascular Pharmacology*. 2006;47(6):729-735
10. Qi M., Xia H., Dai D. [Effects of breviscapin on isoproterenol-induced myocardial hypertrophy in mice](#). *Chinese Journal of Clinical Pharmacology and Therapy*. 2006;11(3):273-276
11. Qi M., Xia H., Dai D. [CPU86017 and its enantiomers inhibit abnormal gene expression of calcineurin and NF \$\kappa\$ B in rat cardiomyopathy induced by L-thyroxin](#). *Chinese Journal of Clinical Pharmacology and Therapy*. 2006;11(4):392-397
12. Liu H., Xia H., Dai D. [Effects of three extracts of Fufang Dihuang decoction on relaxation of mesentery artery in streptozotocin-induced diabetic rat](#). *Chinese Journal of Clinical Pharmacology and Therapy*. 2006;11(5):545-549
13. Feng Y., Yue X., Xia H., Bindom S.M., Hickman P.J., Filipeanu C.M., Wu G. & Lazartigues E. [ACE2 over-expression in the subfornical organ prevents the Angiotensin-II-mediated pressor and drinking responses and is associated with AT1 receptor down-regulation](#). *Circulation Research*, 2008; 102(6):729-736. PMID: 18258853. PMCID: PMC2279097.
14. Xia H. & Lazartigues E. [Angiotensin converting enzyme 2 in the brain: properties and future directions](#). (Invited Review) *Journal of Neurochemistry*, 2008;107:1482-1494. PMID: 19014390; PMCID: PMC2667944
15. Xia H., Feng Y., Obr T.D., Hickman P.J. & Lazartigues E. [AT1 receptor-mediated reduction of ACE2 activity in the brain impairs baroreflex function in hypertensive mice](#). *Hypertension*, 2009; 53(2):210-216 (Cover of the February 1st issue of Hypertension). PMID: 19124678. PMCID: PMC2695598.
16. Hans C.P., Feng Y., Naura A.S., Zerfaoui M., Rezk B., Xia H., Kaye A.D., Matrougui K., Lazartigues E. & Boulares H. [Protective Effects of PARP-1 Knockout on Dyslipidemia Induced Autonomic and Vascular Dysfunction in ApoE^{-/-} Mice: Effects on eNOS and Oxidative Stress](#). *PLoS One*, 2009; 4(10):e7430.
17. Feng Y., Xia H., Cai Y., Halabi C.M., Sigmund, C.D. & Lazartigues E. [Brain-selective Overexpression of Human Angiotensin-Converting Enzyme 2 Attenuates neurogenic Hypertension](#). *Circulation Research*, 2010; 106(2):373-382. (Cover Figure). PMID: 19926873; PMCID: PMC2818798
18. Feng Y., Xia H., Santos R.A., Speth R. & Lazartigues E. [ACE2: A new target for neurogenic hypertension](#). *Experimental Physiology*, 2010; 95 :601-606. PMID: 19923158; PMCID: PMC2858233
19. Xia H. & Lazartigues E. [Angiotensin converting enzyme 2: Central regulator for cardiovascular function](#). *Current Hypertension Reports*, 2010; 12(3):170-175. PMID: 20424953; PMCID: PMC3093757
20. Bindom S.M., Hans C.P., Xia H., Boulares H & Lazartigues E. [Angiotensin-I Converting Enzyme type 2 \(ACE2\) gene therapy improves glycemic control in diabetic mice](#). *Diabetes*, 2010; 59(10):2540-2548. PMID: 20660625; PMCID: PMC3279528
21. Xia H., Suda S., Bindom S.M., Feng Y., Gurley S., Seth D., Navar G. & Lazartigues E. [ACE2-Mediated Reduction Of Oxidative Stress In The Central Nervous System Is Associated With Improvement Of Autonomic Function](#). *PLoS ONE*, 2011;6(7):e22682. PMID: 21818366; PMCID: PMC314492

22. Pedersen K., **Xia H.**, Sriramula S., Chhabra K. & Lazartigues E. [Species-specific inhibitor sensitivity of angiotensin-converting enzyme 2 \(ACE2\) and its implication for ACE2 activity assays](#). *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 2011; 301(5):R1293-R1299. PMID: 21880865; PMCID: PMC3213941
23. Chhabra K., **Xia H.**, Pedersen K & Lazartigues E. [Pancreatic Angiotensin-Converting Enzyme 2 \(ACE2\) protects against impaired glycemic control in angiotensin II-infused mice](#). *AJP-Endocrinology and Metabolism* 2013 ; 304(8) :E874-884. PMID:23462816. PMCID: PMC 3625779
24. **Xia H.**, Sriramula S., Chhabra K. & Lazartigues E. [Brain ACE2 shedding contributes to the development of neurogenic hypertension](#). *Circulation Research*. 2013;113:1087-1096. PMID: 24014829
25. Pedersen K.B., Chhabra K., Nguyen V.K., **Xia H.** & Lazartigues E. [The transcription factor HNF1 \$\alpha\$ induces expression of angiotensin-converting enzyme 2 \(ACE2\) in pancreatic islets from evolutionarily conserved promoter motifs](#). *Biochim. Biophys. Acta*. 2013;1829(11):1225-1235. PMID:24100303
26. Chhabra KH., **Xia H.**, Shenoy V. & Lazartigues E. Pancreatic ACE2 gene therapy reverses high-fat diet-mediated ACE2 shedding and hyperglycemia in male mice. *Endocrinology*. (In revision)
27. ***Xia H.**, *Deshotels MR, Lazartigues E & Catalin M. Filipeanu. Angiotensin-II mediates ACE2 Internalization and Degradation through an Angiotensin-II type I receptor-dependent mechanism. *Hypertension*. (Under review)
- *Co-first-author
28. ***Xia H.**, Llorens-Cortes C & Poglitsch M. ACE2-Apelin interaction in neuroblastoma cells. *Cellular and Molecular Neurobiology* (Under review)
- *Corresponding author

D. Research Support:

Current

None.

Pending

- 14SDG18560038 Huijing Xia (PI) 01/01/14-12/31/17
The American Heart Association
Scientist Development Grant
“Brain ACE2-apelin signaling and metabolism”
The major goal of this project is to examine the central effects of ACE2 in metabolism and the mechanisms involved.

Completed

- 0560007Z Huijing Xia (PI) Eric Lazartigues (Sponsor) 08/01/09-07/31/11
The American Physiological Society
Postdoctoral Fellowship in Physiological Genomics
“Brain ACE2 and Oxidative Stress in Angiotensin-II-mediated Hypertension”
The major goal of this project is to examine the central effects of ACE2 on oxidative stress and blood pressure regulation.