Curriculum Vitae

Personal Information

Name: Zhang, Jiandong
Phone: 919-737-5665
Email: njzjd08@hotmail.com Zhangji15@ecu.edu
Birthday & Place: August 1981, Jiangsu, China
Nationality: Chinese
Gender: Male
Language: Chinese, English
Address: 1015 Katie Ln, Cary, NC 27519

Education

09/1997-07/2002 Nanjing Medical University, Nanjing, China (M.D. equivalent)
09/2002-07/2005 Southeast University, Nanjing, China (The Master degree of medicine science)
11/2006-07/2010 Joint program University of Utah/ Southeast University, China (Ph.D.)

ECFMG certification (Oct 2014)

Clinical Training Experience

08/2003-08/2006 Resident, Zhongda Hospital, Nanjing (Internal Medicine)
07/2015- 06/2016 Intern Vidant Medical Center/ Brody School of Medicine, East Carolina University
07/2016-06/2018 Resident Vidant Medical Center/ Brody School of Medicine, East Carolina University

Research Training Experience

06/2010- Postdoctoral Fellow, Duke University (Mentor, Steven Crowley)
My research focused on interactions of immune system and renin angiotensin system in the setting of variety of cardio-renal diseases.

Work Experience

08/2018- Clinical Assistant Professor, Brody School of Medicine, East Carolina University
Attending Physician, Assistant Professor, Southeastern Regional Medical Center, Affiliated to Campbell University.

Publications

1. **Zhang J,** Rudemiller NP, Patel MB, Wei QQ, Karlovich NC, Jeffs AD, Wu M, Sparks MA, Privratsky JR, Herrera M, Gurley SB, Nedospasov SA, Crowley SD. Competing Actions of Type 1 Angiotensin II receptors Expressed on T lymphocytes

and kidney epithelium during cisplatin-induced AKI. **J Am Soc Nephrol**. 2016 27(8) 2257-64 (IF=8.491)
--research highlighted by Nature Reviews Nephrology Jan 25, 2016

2. **Zhang J,** Rudemiller NP, Patel MB, Karlovich NC, Wu M, McDonough AA, Griffiths R, Sparks MA, Jeffs AD, Crowley SD. Interleukin-1 Receptor activation potentiates salt reabsorption in Angiotensin II-induced Hypertension via the NKCC2 co-transporter in the nephron. **Cell Metab**. 2016 23(2) 230-8 (IF=17.3)
--research highlighted by Nature Reviews Nephrology Jan 19, 2016

3. **Zhang J,** Patel MB, Griffiths R, Mao A, Song YS, Karlovich NS, Sparks MA, Jin H, Wu M, Lin EE, Crowley SD. Tumor Necrosis Factor-α Produced in the Kidney Contributes to Angiotensin II-dependent Hypertension. **Hypertension**. 2014 64 1275-1281 (IF=6.294)

4. **Zhang J,** Mehul P, Song Y, Griffiths R, Burchette J, Ruiz P, Sparks M, Yan, M, Howell, D, Crowley SD. Type-1 angiotensin receptors on macrophages ameliorate interleukin-1 receptor-mediated kidney fibrosis **J Clin Invest**. 2014 124(5) 2198-03 (IF=12.575)
--highlighted in JCI digest
--Editorial Commentary by Science Translational Medicine "Angiotensin Blockade—A Double-Edged Sword in Renal Failure" 2014 May 28
--collected in Kidney International 2014 86, 3-4 Journal Club

5. **Zhang J,** Mehul P, Song Y, Griffiths R, Burchette J, Ruiz P, Sparks M, Yan, M, Howell, D, Wilson C, Foster I, Coffman T. Crowley SD. A novel role for type 1 angiotensin receptors on T lymphocytes to limit hypertensive target organ damage. **Circulation Research** 2012 110(12) 1604-1617 (IF=11.861)
--Highlighted in Circulation Research
--Editorial Commentary in Circulation Research
--Highlighted in Nature Reviews Nephrology 2012 July

6. **Zhang J,** Crowley SD. Role of T lymphocytes in hypertension. **Curr Opin Pharmacol**. 2015 21 14-9 (IF=3.057)

7. **Zhang J,** Gu C, Lawrence DA, Cheung AK, Huang Y. A PAI-1 mutant retards diabetic nephropathy in db/db mice through protecting podocytes. **Exp Physiol.** 2014 99: 802-15 (**Co-first author**) (IF=2.818)

8. **Zhang J,** Crowley SD. The Role of Type 1 Angiotensin Receptors on T Lymphocytes in Cardiovascular and Renal Diseases. **Curr Hypertens Rep**. 2013 15(1):39-46 (IF=3.112)

9. **Zhang J*,** Wu J, Gu C, Noble NA, Border WA, Huang Y. Receptor-mediated non-proteolytic activation of prorenin and induction of TGFss1 and PAI-1 expression in renal mesangial cells. **Am J Physiol Renal Physiol**. 2012 303(1) F11-20 **(Co-Corresponding author)** (IF=3.39)

10. Chen L, Wu YG, Liu D, Lv LL, Zheng M, Ni HF, Cao YH, Liu H, Zhang P, **Zhang JD**, Liu BC. Urinary mRNA expression of CCN2/CCN3 as a noninvasive marker for monitoring glomerular structure changes in nondiabetic chronic kidney disease. **Biomarkers**. 2012 17(8):714-20 (**Corresponding author**) (IF=2.016)

11. **Zhang JD**, Liu BC. Angiotensin II, a missing node in new pathogenic glomerulotubular feedback loop. **Med Hypotheses** 2011 77(4) 595-597 (IF=1.116)

12. **Zhang J*,** Gu C, Noble NA, Border WA, Huang Y. Combining angiotensin II blockade and renin receptor inhibition results in enhanced antifibrotic effect in experimental nephritis. **Am J Physiol Renal Physiol.** 2011 301(4) F723-732. (IF=3.39)

13. **Zhang J*,** Noble N, Border W, Huang Y. Infusion of angiotensin-(1–7) reduces glomerulosclerosis through counteracting angiotensin II in experimental glomerulonephritis. **Am J Physiol Renal.** 2010 F579-F588. (IF=3.39)

14. **Zhang J***, Noble N, Border W, Owens RT, Huang Y. Receptor-dependent prorenin activation and induction of PAI-1 expression in vascular smooth muscle cells. **Am J Physiol Endocrinol Metab**. 2008 295: E810-E819. (IF=3.825)

15. **Zhang J***， Mao Y. Beyond Beck's Triad: A case report in a "super-super" obese patient. IJC medtabolic &. Endocrine 2017; 15:4-5

16. Gu C, **Zhang J**,Noble NA, Peng XR, Huang Y. An additive effect of PAI-1 antibody to ACE inhibitor on slowing the progression of diabetic kidney disease. AM J Physiol Renal Physiol. 2016; 311(5) F852-63 (IF=3.39)

17. Rudemiller NP, Patel MB, **Zhang JD**, Jeffs AD, Karlovich NS, Griffiths R, Kan MJ, Buckley AF, Gunn MD, Crowley SD. C-C Motif Chemokine 5 Attenuates Angiotensin II-Dependent Kidney Injury by Limiting Renal Macrophage Infiltration. **Am J Pathol**. 2016 Nov;186(11):2846-2856 (IF=4.206)

18. Madan B, Patel MB, **Zhang J**, et al. Experimental inhibition of porcupine-mediated Wnt O-acylation attenuates kidney fibrosis. Kidney Int. 2016 May;89(5):1062-74 (IF=7.683)

19. Huang Y, Border WA, Yu L, **Zhang J***, Lawrence DA, Noble NA. A PAI-1 mutant, PAI-1R, slows progression of diabetic nephropathy. **J Am Soc Nephrol**. 2008;19(2):329-38 (IF=8.491)

20. Huang Y, Noble NA, **Zhang J,** Xu C, Border WA. Renin-stimulated TGF-beta1 expression is regulated by a mitogen-activated protein kinase in mesangial cells. **Kidney Int**. 2007;72(1):45-52 (IF=7.683)

21. Wu M, Tang RN, Liu H, Pan MM, Lv LL, **Zhang JD**, Crowley SD, *Liu BC: Cinacalcet ameliorates cardiac fibrosis in uremic hearts through suppression of endothelial-to-mesenchymal transition. **Int J Cardiol.** 2014 Feb 15;171(3):e65-9. (IF=7.078)

22. Ni H, Chen J, Pan M, Zhang M, **Zhang J**, Chen P, *Liu B**:** FTY720 prevents progression of renal fibrosis by inhibiting renal microvasculature endothelial dysfunction in a rat model of chronic kidney disease. **J Mol Histol**. 2013;44(6):693-703. (IF=1.752)

23. Ni HF, Chen JF, Zhang MH, Pan MM, **Zhang JD**, Liu H, Tang RN, Ma KL, *Liu BC:FTY720 attenuates tubulointerstitial inflammation and fibrosis in subtotally nephrectomized rats. **Ren Fail.** 2013;35(7):996-1004. (IF=0.941)

24. Tang RN, Lv LL, **Zhang JD**, Dai HY, Li Q, Zheng M, Ni J, Ma KL, *Liu BC: Effects of angiotensin II receptor blocker on myocardial endothelial-to-mesenchymal transition in diabetic rats. **Int J of Cardiol.** 2013;162(2):92-9. (IF=7.078)

25. Zheng M, Lv LL, Cao YH, **Zhang JD**, Wu M, Ma KL, Phillips AO, *Liu BC: Urinary mRNA markers of epithelial-mesenchymal transition correlate with progression of diabetic nephropathy. **Clin Endocrinol.** 2012;76(5):657-64. (IF=3.398)

26. Cao YH, Lü LL, **Zhang JD**, *LiuBC: Application of systems biology to the study of chronic kidney disease. **Chin Med J (Engl).** 2012;125(14):2603-9. (IF=0.983)

27. Liu BC, Li MX, **Zhang JD**, Liu XC, Zhang XL, Phillips AO**:** Inhibition of integrin-linked kinase via a siRNA expression plasmid attenuates connective tissue growth factor-induced human proximal tubular epithelial cells to mesenchymal transition. **Am J Nephrol.** 2008;28(1):143-51 (IF=3.481)

28. Liu XC, Liu BC, Zhang XL, Li MX, **Zhang JD:** Role of ERK1/2 and PI3-K in the regulation of CTGF-induced ILK expression in HK-2 cells. **Clin Chim Acta.** 2007**;**382(1-2):89-94. (IF=2.96)

29. Chen L, Liu BC, Zhang XL, **Zhang JD**, Liu H, Li MX**:** Influence of connective tissue growth factor antisense oligonucleotide on angiotensin II-induced epithelial mesenchymal transition in HK2 cells. **Acta Pharmacol Sin.** 2006**;**27(8):1029-36. (IF=3.166)

30. Liu BC, **Zhang JD**, Zhang XL, Wu GQ, Li MX**:** Role of connective tissue growth factor (CTGF) module 4 in regulating epithelial mesenchymal transition (EMT) in HK-2 cells. **Clin Chim Acta.** 2006**;**373(1-2):144-50. (IF=2.96)

31. Wu M, **Zhang JD**, Tang RN, Crowley SD, Liu H, Lv LL, Ma KL, Liu BC. Elevated PTH induces endothelial to chondrogenic transition in aortic endothelial cells. Am J Physiol Renal Physiol. 2017;312 (3): F436-F444 (IF=3.39)

32. Pivratsky JR, Zhang J, Lu X,Rudemiller N, Wei Q, Yu YR, Gunn MD, Crowley SD. Am J physiol Renal Physiol 2018; 315(3) F682-91

Award talks

"Interleukin-1 potentiates sodium retention in angiotensin II-dependent hypertension through NO-dependent regulation of Na+-K+-2Cl- cotransporter" Young Investigator Award Lecture, Gordon Research Conference Lucca, Italy, March 1st, 2014

"An experimental journey to optimize RAS blockade in kidney diseases" Awardee Lecture, Chinese American Society of Nephrology Chicago, USA, Nov 18th 2016

Awards

New Investigator Award AHA HBPR annual meeting (2011, 2012, 2014)
Best Poster Abstract AHA HBPR 2013
Young Investigator Award Gordon Research Conference Lucca, Italy, 2014
Outstanding Trainee Award Chinese American Society of Nephrology Chicago, USA, 2016

Grants

AHA Postdoc fellow 12POST11910012 Zhang (PI) 07/01/12-06/30/14
Macrophage AT1 receptors regulate hypertensive kidney injury via an IL-1-dependent pathway

Mandel Hypertension and Atherosclerosis Seed Grant Zhang (PI)
01/01/14-12/31/14 Tissue-specific role of IL-1 receptor in Ang II-dependent hypertension