

**Jiang Tian, Ph.D.**

Associate Professor

Division of Cardiovascular Medicine, Department of Medicine

Office: (419) 383-3510

Laboratory: (419) 383-3923

Email: Jiang.Tian@Utoledo.Edu

**Education**

B.A., Nanjing University, Nanjing, China, 1988

M.S., Chinese Academy of Preventive Medicine, Beijing, China, 1991

Ph.D., University of Toledo, Toledo, Ohio, 2006

**Postgraduate Training**

University of Toledo Health Science Campus, Department of Physiology and Pharmacology, Toledo, Ohio 2006-2007

**Academic Appointments**

1991- 1998 Doctor of Public Health, Analysis Center of Sanitation & Anti-Epidemic Station of Ningxia, Yinchuan, China

1998- 2006 Research Assistant, Department of Pharmacology, University of Toledo, Toledo, OH.

2006- 2007 Post-Doc Fellow, Department of Physiology and Pharmacology, University of Toledo, Toledo, OH

2007- 2012 Assistant Professor (research track), University of Toledo, Department of Medicine, Toledo, OH.

2012- 2015 Assistant Professor (tenure track), University of Toledo, Department of Medicine, Toledo, OH.

2015 (July) - Associate Professor, University of Toledo, Department of Medicine, Toledo, OH.

**Research Funding:**

R01 HL105649 Tian (PI) 12/15/2011-11/30/2016

NIH/NHLBI

**Research Interest:**

1. Molecular mechanisms of cardiovascular disease, with special emphasis on uremic cardiomyopathy. Use of Na/K-ATPase alpha1 heterozygous knockout mouse models as well as human blood samples to study the relationship between Na/K-ATPase content, circulating levels of CTS, and cardiovascular functions.
2. Cardiac stem/progenitor cell activation and its role in cardiac repair and regeneration
3. MicroRNA-29b (miR-29b) regulation in uremic cardiomyopathy

**Publications****Selected Publications**

1. Drummond CA, Hill MC, Shi H, Fan X, Xie JX, Haller ST, Kennedy DJ, Liu J, Garrett MR, Xie Z, Cooper CJ, Shapiro JI, Tian J. Na/K-ATPase Signaling Regulates Collagen Synthesis Through microRNA-29b-3p in Cardiac Fibroblasts. *Physiol Genomics*. 2015. [physiolgenomics.00116.2015](https://pubmed.ncbi.nlm.nih.gov/25811162/). PubMed PMID:

- 26702050.
2. Sayed M, Drummond CA, Evans KL, Haller ST, Liu J, Xie Z, Tian J. Effects of Na/K-ATPase and its ligands on bone marrow stromal cell differentiation. *Stem cell research*. 2014;13(1):12-23. PubMed PMID: 24793006.
  3. Drummond CA, Sayed M, Evans KL, Shi H, Wang X, Haller ST, Liu J, Cooper CJ, Xie Z, Shapiro JI, Tian J. Reduction of Na/K-ATPase affects cardiac remodeling and increases c-kit cell abundance in partial nephrectomized mice. *Am J Physiol Heart Circ Physiol*. 2014;306(12):H1631-43. PubMed PMID: 24748592; PMCID: PMC4059984.
  4. Drummond CA, Buddny G, Haller ST, Liu J, Yan Y, Xie Z, Malhotra D, Shapiro JI, Tian J. Gender differences in the development of uremic cardiomyopathy following partial nephrectomy: Role of progesterone. *Journal of hypertension* : open access. 2013. PubMed PMID: 24404431; PMCID: 3880896.
  5. Liu C, Bai Y, Chen Y, Wang Y, Sottejeau Y, Liu L, Li X, Lingrel JB, Malhotra D, Cooper CJ, Shapiro JI, Xie ZJ, Tian J. Reduction of Na/K-ATPase potentiates marinobufagenin-induced cardiac dysfunction and myocyte apoptosis. *The Journal of biological chemistry*. 2012;287(20):16390-8. PubMed PMID: 22451662; PMCID: 3351339.
  6. Tian J, Haller S, Periyasamy S, Brewster P, Zhang H, Adlakha S, Fedorova OV, Xie ZJ, Bagrov AY, Shapiro JI, Cooper CJ. Renal ischemia regulates marinobufagenin release in humans. *Hypertension*. 2010;56(5):914-9. PubMed PMID: 20823380; PMCID: 2959137.
  7. Tian J, Shidyak A, Periyasamy SM, Haller S, Taleb M, El-Okdi N, Elkareh J, Gupta S, Gohara S, Fedorova OV, Cooper CJ, Xie Z, Malhotra D, Bagrov AY, Shapiro JI. Spironolactone attenuates experimental uremic cardiomyopathy by antagonizing marinobufagenin. *Hypertension*. 2009;54(6):1313-20. PubMed PMID: 19884563; PMCID: 2783263.
  8. Tian J, Li X, Liang M, Liu L, Xie JX, Ye Q, Kometiani P, Tillekeratne M, Jin R, Xie Z. Changes in sodium pump expression dictate the effects of ouabain on cell growth. *The Journal of biological chemistry*. 2009;284(22):14921-9. PubMed PMID: 19329430; PMCID: 2685674.
  9. Tian J, Cai T, Yuan Z, Wang H, Liu L, Haas M, Maksimova E, Huang XY, Xie ZJ. Binding of Src to Na<sup>+</sup>/K<sup>+</sup>-ATPase forms a functional signaling complex. *Molecular biology of the cell*. 2006;17(1):317-26. PubMed PMID: 16267270; PMCID: 1345669.

**Full publication URL link**

**<http://www.ncbi.nlm.nih.gov/sites/myncbi/16QDvygXfLzku/bibliography/42575349/public/>**