## 重点实验室团队人员简介



王 利 长聘副教授 博士生导师

邮箱: wangl@pumc.edu.cn

网站: sklcvd.fuwaihospital.org/wanglab

## 研究方向:

Understanding the molecular foundation of cell fate decision in cardiac lineage commitment will greatly facilitate the application of pluripotent stem cells. The importance of chromatin as regulator of physiological and pathophysiological events is becoming increasingly evident.

However, the precise functions of chromatin regulation in cell fate decision in lineage commitment remains under investigated. Our work aims to fill the gap in our current understanding on the molecular basis of chromatin regulation-dictated cell fate decision in development and diseases. Findings from these studies will provide both novel mechanistic insights and potential therapeutic values for development and diseases, and build the foundation for stem cell-based regenerative medicine.

## 代表论著:

- 1、Wang L, Du Y, Shimbo T, Lackford B, Zheng X, Miao Y, Zhou B, Fargo D, Jothi R, Williams C, Wade P, Hu G. INO80 Facilitates Pluripotency Gene Activation in Embryonic Stem Cell Self-Renewal, Reprogramming, and Blastocyst Development. Cell Stem Cell. 2014; 14(5):575-591.
- 2 Wang L, Miao YL, Zheng X, Lackford B, Zhou B, Han L, Yao C, Ward JM, Burkholder A, Lipchina I, Fargo DC, Hochedlinger K, Shi Y, Williams CJ, Hu G. The THO Complex Regulates Pluripotency Gene mRNA Export and Controls Embrynoic Stem Cell Self-Renewal and Somatic Cell Reprogramming. Cell Stem Cell. 2013; 13(6):676-690.
- 3 Lan F, Lee AS, Liang P, Sanchez-Freire V, Nguyen PK, Wang L, Han L, Yen M, Wang Y, Sun N, Abilez OJ, Hu S, Ebert AD, Navarrete EG, Simmons CS, Wheeler M, Pruitt B, Lewis R,

Yamaguchi Y, Ashley EA, Bers DM, Robbins RC, Longaker MT, Wu JC. Abnormal calcium handling properties underlie familial hypertrophic cardiomyopathy pathology in patient-specific induced pluripotent stem cells. Cell Stem Cell. 2013;12(1):101-113.

- 4、Wang L, Zheng J, Du Y, Huang Y, Li J, Liu B, Liu CJ, Zhu Y, Gao Y, Xu Q, Kong W, Wang X. Cartilage oligomeric matrix protein maintains the contractile phenotype of vascular smooth muscle cells by interacting with alpha(7)beta(1) integrin. Circ Res. 2010;106(3):514-525.
- 5 Wang L, Zheng J, Bai X, Liu B, Liu CJ, Xu Q, Zhu Y, Wang N, Kong W, Wang X. ADAMTS-7 mediates vascular smooth muscle cell migration and neointima formation in balloon-injured rat arteries. Circ Res. 2009;104(5):688-698.