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|  | **Role of CaMKII in heart cell fate regulation** Rui-Ping Xiao*College of Future Technology, Peking University,* *Beijing, China**\*Correspondence:xiaor@pku.edu.cn* |
| **Short CV**Dr. Rui-Ping Xiao, a Peking University Chair Professor, is the Dean of the College of Future Technology at Peking University. Dr. Xiao received her M.D. degree from Tongji Medical University in 1987 and her Ph.D. degree in Physiology from the University of Maryland in 1995. In 2003, she was appointed as a Principal Investigator with tenure of the National Institutes of Health, and in 2010, she returned to China to become the founding Director of the Institute of Molecular Medicine at Peking University. Dr. Xiao’s research has been focused on cardiovascular and metabolic diseases, with an emphasis on a translational approach to bring bench discoveries to clinically relevant situations. Ongoing research directions include signaling pathways involved in Cardiometabolic disease. She served as a Council Member of the International Society of the Heart (ISHR) from 2002 to 2021 and was elected a Fellow of the American Society for Clinical Investigation (ASCI) in 2004. Currently, Dr. Xiao serves as an Associate Editor of the New England Journal of Medicine and an Editorial Board Member of multiple international top journals. |
| **Representative publications:**1. Liu X, Li S, Cui Q, Guo B, Ding W, Liu J, Quan L, Li X, Xie P, Jin L, Sheng Y, Chen W, Wang K, Zeng F, Qiu Y, Liu C, Zhang Y, Lv F, Hu X, **Xiao RP**. Activation of GPR81 by Lactate drives tumor-induced cachexia. ***Nat Metab*.** 6(4):708-723, 2024.
2. Lv F\*, Wang Y, Shan D, Guo S, Chen G, Jin L, Zheng W, Feng H, Zeng X, Zhang S, Zhang Y, Hu X, **Xiao RP**. Blocking MG53S255 Phosphorylation Protects Diabetic Heart From Ischemic Injury. ***Circ Res*.** 131(12):962-976, 2022.
3. Zhang J, Liang R, Wang K, Zhang W, Zhang M, Jin L, Xie P, Zheng W, Shang H, Hu Q, Li J, Chen G, Wu F, Lan F, Wang L, Wang SQ, Li Y, Zhang Y, Liu J, Lv F, Hu X, **Xiao RP**, Lei X, Zhang Y. Novel CaMKII-δ Inhibitor Hesperadin Exerts Dual Functions to Ameliorate Cardiac Ischemia/Reperfusion Injury and Inhibit Tumor Growth. ***Circulation*.** 145(15):1154-1168, 2022.
4. Yao Y, Li F, Zhang M, Jin L, Xie P, Liu D, Zhang J, Hu X, Lv F, Shang H, Zheng W, Sun X, Duanmu J, Wu F, Lan F, **Xiao RP**, Zhang Y. Targeting CaMKII-δ9 Ameliorates Cardiac Ischemia/Reperfusion Injury by Inhibiting Myocardial Inflammation. ***Circ Res*.** 130(6):887-903, 2022.
5. Jiang P, Ren L, Zhi L, Yu Z, Lv F, Xu F, Peng W, Bai X, Cheng K, Quan L, Zhang X, Wang X, Zhang Y, Yang D, Hu X, **Xiao RP**. Negative Regulation of AMPK Signaling by High Glucose via E3 Ubiquitin Ligase MG53. ***Mol Cell.*** 81(3):629-637, 2021.
6. Song Y, Xu C, Liu J, Li Y, Wang H, Shan D, Wainer IW, Hu X, Zhang Y, Woo AY, **Xiao RP.** Heterodimerization with 5-HT2BR Is Indispensable for β2AR-mediated Cardioprotection. ***Circ Res.***128(2):262-277, 2021.
7. Zhang M, Gao H, Liu D, Zhong X, Shi X, Yu P, Jin L, Liu Y, Tnag Y, Song Y, Liu J, Hu X, Li CY, Song L, Qin J, Wu F, Jan F, Zhang Y, **Xiao RP**. CaMKII-δ9 Promotes Cardiomyopathy through Disrupting UBE2T-dependent DNA Repair. ***Nat Cell Biol.*** 21:1152-1163, 2019.
8. Wu HK, Zhang Y, Cao CM, Hu X, Fang M, Yao Y, Jin L, Chen G, Jiang P, Zhang S, Song R, Peng W, Liu F, Guo J, Tang L, He Y, Shan D, Huang J, Zhou Z, Wang D, Lv F, **Xiao RP**. Glucose-sensitive Myokine/Cardiokine MG53 Regulates Systemic Insulin Response and Metabolic Homeostasis. ***Circulation*.** 139:901–914, 2019.
9. Zhang T, Zhang Y, Cui M, Jin L, Wang Y, Lv F, Liu Y, Zheng W, Shang H, Zhang J, Zhang M, Wu HK, Guo J, Zhang X, Hu X, Cao CM, **Xiao RP**. CaMKII is a RIP3 substrate mediating ischemia- and oxidative stress-induced myocardial necroptosis. ***Nat Med.*** 22(2): 175-182, 2016.
10. SongR, Peng W, Zhang Y, Lv F, Wu HK, Guo J, Cao Y, Pi Y, Zhang X, Jin L, Zhang M, Jiang P, Liu F, Meng S, Zhang X, Jiang P, Cao CM, **Xiao** **RP**. Central role of E3 ubiquitin ligase MG53 in insulin resistance and metabolic disorders. ***Nature.*** 494(7437): 375-379, 2013.
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