Research Publications ([1]Primary author)

1. Large-conductance calcium-activated K^+ channels, rather than K_{ATP} channels, mediate the inhibitory effects of nitric oxide on mouse lymphatic pumping (2021)
   Kim HJ[1], Li M, Nichols CG, Davis MJ.
   Br J Pharmacol. PMID: 34213021

2. Downregulation of soluble guanylate cyclase and protein kinase G with upregulated ROCK2 in the pulmonary artery leads to thromboxane A2 sensitization in monocrotaline-induced pulmonary hypertensive rates. (2021)
   Cho S, Namgoong H, **Kim HJ**, Vorn R, Yoo HY, Kim SJ.
   Front Physiol. 3;12:624967. PMID: 33613315

3. Kir6.1-dependent K_{ATP} channels in lymphatic smooth muscle and vessel dysfunction in mice with Kir6.1 gain-of-function. (2020)
   Davis MJ, **Kim HJ**, Zawieja SD, Castorena-Gonzalez JA, Gui P, Li M, Saunders BT, Zinselmeyer BH, Randolph G, Remedi MS, Nichols CG.
   J Physiol. 598(15):3107-3127. PMID: 32372450

4. Decreased inward rectifier and voltage-gated K^+ currents of the right septal coronary artery smooth muscle cells in pulmonary arterial hypertensive rats. (2020)
   Kim SE, Yin MZ, **Kim HJ**, Vorn R, Yoo HY, Kim SJ.
   Korean J Physiol Pharmacol, 24(1):111-119. PMID: 31908580

5. Increased inward rectifier K^+ current of coronary artery smooth muscle cells in spontaneously hypertensive rats; partial compensation of the attenuated endothelium-dependent relaxation via Ca^{2+}-activated K^+ channels. (2020)
   Kim HJ[1], Yin MZ[1], Cho S, Kim SE, Choi SW, Ye SK, Yoo HY, Kim SJ.
   Clin Exp Pharmacol Physiol, 47(1):38-48. PMID: 31444788

6. Fast relaxation and desensitization of angiotensin II contraction in the pulmonary artery via AT1R and Akt-mediated phosphorylation of muscular eNOS. (2019)
   Kim HJ[1], Jang JH[1], Zhang YH, Yoo HY, Kim SJ.
   Pflugers Arch, 471(10):1317-1330. PMID: 31468138

7. Endurance exercise training restores atrophy-induced decreases of myogenic response and ionic currents in rat skeletal muscle artery. (2019)
   Yin MZ[1], **Kim HJ[1]**, Seo EY[1], Zhang YH, Yoo HY, Kim SJ.
   J Appl Physiol (1985), 126(6):1713-1724. PMID: 30920885

8. Potentiation of endothelium-dependent vasorelaxation of mesenteric arteries from spontaneous hypertensive rats by gemigliptin, a dipeptidyl peptidase-4 inhibitor class of anti-diabetic drug. (2018)

Kim HJ[1], Baek EB, Kim SJ.
Korean J Physiol Pharmacol, 22(6):713-719. PMID: 30402032

9. Biphasic augmentation of alpha-adrenergic contraction by plumbagin in rat systemic arteries. (2017)
Kim HJ[1], Yoo HY, Zhang YH, Kim WK, Kim SJ.
*Korean J Physiol Pharmacol,*21(6):687-694. PMID: 29200912

10. Hypoxic pulmonary vasoconstriction and vascular contractility in monocrotaline-induced pulmonary arterial hypertensive rats. (2016)
Kim HJ[1], Yoo HY.
Korean J Physiol Pharmacol, 20(6):641-647. PMID: 27847441

11. Role of muscular eNOS in skeletal arteries: Endothelium-independent hypoxic vasoconstriction of the femoral artery is impaired in eNOS-deficient mice. (2016)
Kim HJ[1], Yoo HY, Lin HY, Oh GT, Zhang YH, Kim SJ.
Am J Physiol Cell Physiol, 1;311(3):C508-17. PMID: 27486092

12. Wall stretch and thromboxane A_2 activate NO synthase (eNOS) in pulmonary arterial smooth muscle cells via H_2O_2 and Akt-dependent phosphorylation. (2016)
Kim HJ[1], Yoo HY, Jang JH, Lin HY, Seo EY, Zhang YH, Kim SJ.
Pflugers Arch, 468(4):705-16. PMID: 26729266

13. Spontaneous inward currents reflecting oscillatory activation of Na^+/Ca^{2+} exchangers in human embryonic stem cell-derived cardiomyocytes. (2015)
Choi SW, Lee HA, Moon SH, Park SJ, **Kim HJ**, Kim KS, Zhang YH, Youm JB, Kim SJ.
Pflugers Arch, 468(4):609-22. PMID: 26689128

14. Airway smooth muscle sensitivity to methacholine in Precision-Cut Lung Slices (PCLS) from ovalbumin-induced asthmatic mice. (2015)
Kim HJ[1], Kim Y, Park SJ, Bae B, Kang HR, Cho SH, Yoo HY, Nam JH, Kim WK, Kim SJ.
Korean J Physiol Pharmacol, 19(1):68-71. PMID: 25605999

15. Integrative understanding of hypoxic pulmonary vasoconstriction using in vitro models: from ventilated/perfused lung to single arterial myocyte. (2014)
Yoo HY, Park SJ, **Kim HJ**, Kim WK, Kim SJ.
Integr Med Res, 3(4):180-188. PMID: 28664095

16. Low K^+ current in arterial myocytes with impaired K^+-vasodilation and its recovery by exercise in hypertensive rats. (2014)
Seo EY, **Kim HJ**, Zhao ZH, Jang JH, Jin CZ, Yoo HY, Zhang YH, Kim SJ.

Pflugers Arch, 466(11):2101-11. PMID: 24557713

17. Myofilament Ca^{2+} desensitization mediates positive lusitropic effect of neuronal nitric oxide synthase in left ventricular myocytes from murine hypertensive heart. (2013)
    Jin CZ, Jang JH, **Kim, HJ**, Wang Y, Hwang IC, Sadayappan S, Park BM, Kim SH, Jin ZH, Seo EY, Kim KH, Kim YJ, Kim SJ, Zhang YH.
    J Mol Cell Cardiol, 60:107-15. PMID: 23624088

18. Hypoxia-augmented constriction of deep femoral artery mediated by inhibition of eNOS in smooth muscle. (2013)
    Han JA, Seo EY, **Kim HJ**, Park SJ, Yoo HY, Kim JY, Shin DM, Kim JK, Zhang YH, Kim SJ.
    Am J Physiol Cell Physiol, 304(1):C78-88. PMID: 23099643

19. Requirement of Pretone by Thromboxane A_2 for Hypoxic Pulmonary Vasoconstriction in Precision-cut Lung Slices of Rat. (2012)
    Park SJ, Yoo HY, **Kim HJ**, Kim JK, Zhang YH, Kim SJ.
    Korean J Physiol Pharmacol, 16(1):59-64. PMID: 25605999