III - SIRT1 (*corresponding author)

Original discovery and methodology development:

1. Law IK, Liu L, Xu A, Lam KS, Vanhoutte PM, Che CM, Leung PT, **Wang Y***. Identification and characterization of proteins interacting with SIRT1 and SIRT3: implications in the anti-aging and metabolic effects of sirtuins. Proteomics 2009 May;9(9):2444-2456. doi: 10.1002/pmic.200800738.
2. Zu Y, Liu L, Lee MY, Xu C, Liang Y, Man RY, Vanhoutte PM*, **Wang Y***. SIRT1 promotes proliferation and prevents senescence through targeting LKB1 in primary porcine aortic endothelial cells. Circulation Research 2010 Apr 30;106(8):1384-1393. doi:10.1161/CIRCRESAHA.109.215483.
3. Bai B, **Wang Y***. Methods to investigate the role of SIRT1 in endothelial senescence. Methods in Molecular Biology 2013;965:327-339. doi: 10.1007/978-1-62703-239-1_22.
4. Bai B, Liang Y, Xu C, Lee MY, Xu A, Wu D, Vanhoutte PM, **Wang Y***. CDK5-mediated hyperphosphorylation of SIRT1 contributes to the development of endothelial senescence and atherosclerosis. Circulation 2012 Aug 7;126(6):729-740 doi: 10.1161/CIRCULATIONAHA.112.118778.
5. Xu C, Bai B, Fan P, Cai Y, Huang B, Law IK, Liu L, Xu A, Tung C, Li X, Siu FM, Che CM, Vanhoutte PM, **Wang Y***. Selective overexpression of human SIRT1 in adipose tissue enhances energy homeostasis and prevents the deterioration of insulin sensitivity with ageing in mice. American Journal of Translational Research 2013 May 24;5(4):412-426.
6. Xu C, Cai Y, Fan P, Bai B, Chen J, Deng HB, Che CM, Xu A, Vanhoutte PM, **Wang Y***. Calorie restriction prevents metabolic ageing caused by abnormal SIRT1 function in adipose tissues. Diabetes 2015 May;64(5):1576-1590. doi: 10.2337/db14-1180.
7. Bai B, Man AW, Yang K, Guo Y, Xu C, Tse HF, Han W, Bloksgaard M, De Mey JG, Vanhoutte P, Xu A, **Wang Y***. Endothelial SIRT1 prevents arterial remodeling by facilitating HERC2-mediated degradation of acetylated LKB1. Oncotarget 2016 Jun 28;7(26):39065-39081. doi: 10.18632/oncotarget.9687.
8. Hui X, Zhang M, Gu P, Li K, Gao Y, Wu D, **Wang Y***, Xu A*. Adipocyte SIRT1 controls systemic insulin sensitivity by modulating macrophages in adipose tissue. EMBO Reports 2017 Apr;18(4):645-657. doi: 10.15252/embr.201643184
9. Guo Y, Xu C, Man AWC, Luo C, Huang Y, Xu A, Vanhoutte PM*, Wang Y* Endothelial SIRT1 prevents age-induced impairment of vasodilator responses by enhancing the expression and activity of soluble guanylyl cyclase. Cardiovascular Research *Cardiovascular Research*, cvy212, https://doi.org/10.1093/cvr/cvy212

Invited commentary and reviews:

1. **Wang Y***, Liang Y, Vanhoutte PM. SIRT1 and AMPK in regulating mammalian senescence: A critical review and a working model. FEBS Letters 2011 Apr 6;585(7):986-994. doi: 10.1016/j.febslet.2010.11.047.
2. **Wang Y***, Xu C, Liang Y, Vanhoutte PM. SIRT1 in metabolic syndrome: where to target matters. Pharmacology & Therapeutics 2012 Dec;136(3):305-318. doi: 10.1016/j.pharmthera.2012.08.009.
3. **Wang Y***, Vanhoutte PM. Targeting endothelial senescence for atherosclerosis treatment: an approach based on SIRT1 modification. Invited online commentary article by IAS (International Atherosclerosis Society), 2013, July
4. Bai B, Vanhoutte PM, **Wang Y***. Loss-of-SIRT1 function during vascular ageing: hyperphosphorylation mediated by cyclin-dependent kinase 5. Trends in Cardiovascular Medicine 2014 Feb;24(2):81-4. doi: 10.1016/j.tcm.2013.07.001.
5. **Wang Y***. Molecular links between caloric restriction and Sir2/SIRT1 activation. Diabetes & Metabolism Journal 2014 Oct;38(5):321-329. doi: 10.4093/dmj.2014.38.5.321.

6. Guo Y, Xu A, **Wang Y***. SIRT1 in endothelial cells as a novel target for the prevention of early vascular ageing. Journal of Cardiovascular Pharmacology 2016 Jun;67(6):465-473. doi: 10.1097/FJC.0000000000000344.

Book chapters:

1. Guo Y, **Wang Y***. Targeting endothelial SIRT1 for the prevention of arterial aging, in *Endothelial Dysfunction*, Dr. **Helena Lenasi (Ed.)** publisher: InTech 2018 (**Book Chapter**) ISBN 978-953-51-5698-7
2. Guo Y, **Wang Y***, Bai B. CDK5, in *Encyclopedia of Signaling Molecules*, publisher: Springer-Nature. 2018 (**Book Chapter**) **DOI:** https://doi.org/10.1007/978-3-319-67199-4_101554 ISBN 978-3-319-67200-7
3. Man AW, **Wang Y***. Age-associated arterial remodeling and cardiovascular diseases, in Abnormalities of Vascular System, Dr. Giovanni De Caridi (Ed.) publisher: Open Access eBooks. 2017 (**Book Chapter**) ISBN: 978-93-87500-16-7