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| **BIOGRAPHICAL SKETCH** | | | | |
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| NAME  Yiming Xu | |  | | |
| POSITION TITLE  Professor | |
| INSTITUTION AND LOCATION | DEGREE  *(if applicable)* | | MM/YY | FIELD OF STUDY |
|  |  | |  |  |
| Nanjing Medical University | Bachelor | | 2007 | Pharmacy |
| Nanjing Medical University | Ph.D. | | 2012 | Pathophysiology |
| Medical College of Georgia | Postdoc | | present | Vascular Biology |
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1. **Positions and Honors**

**Positions and Employment**

09/2003 – 09/2007 Candidate for Bachelor’s degree in Pharmacy, College of Pharmacy,

Nanjing Medical University, China

09/2007 – 07/2012 Candidate for Ph.D. in Vascular Biology, Department of

pathophysiology, Nanjing Medical University, China (Waived of the

National Entrance Examination)

09/2012 – 09/2017 Postdoctoral fellow in Vascular Biology, Vascular Biology Center,

Medical College of Georgia, GA, USA

10/2017 – 09/2017 Professor, School of Basic Medicine, Guangzhou Medical University,

Guangzhou, China

**Other Experience and Professional Memberships**

Member of American Heart Association

Member of Chinese Pathophysiological Society

Member of Chinese Pharmacological Society

**Honors**

2019-2020: Outstanding young medical talents in Guangdong Province

2018-2019: Science & Technology Award for Young and Middle-aged Talents in

Guangdong Physiological Society

2015-2016: Council on Arteriosclerosis, Thrombosis, and Vascular Biology Travel

Award for Young Investigators, American Heart Association Scientific

Sessions 2015, Orlando, USA

2015-2016: Finalist of ATVB council award of outstanding research by an early career

investigator, American Heart Association Scientific Sessions 2015, Orlando,

USA

2015-2016: ATVB 2015 Early Career Networking Reception for Top-Rated Abstract,

American Heart Association Scientific Sessions 2015, Orlando, USA

2015-2016: Best of Basic Science Abstract, American Heart Association Scientific

Sessions 2015, Orlando, USA

2015-2016: Best of AHA Specialty Conference, American Heart Association Scientific

Sessions 2015, Orlando, USA

2015-2016: New Investigator Travel Award of the Arteriosclerosis, Thrombosis and

Vascular Biology / Peripheral Vascular Disease 2015 Scientific

Sessions, San Francisco, USA

2015-2016: American Heart Association Postdoctoral Fellowship (An

excellent project titled “The Role of Myeloid PFKFB3 in Atherosclerosis”)

2012-2013: The “outstanding graduate student” of Nanjing Medical University

2012-2013: Young Outstanding Paper Award of the 2st Academic Conference of

Jiangsu Association of Pathophysiology, Huaian, China

2011-2012: Awarded 2nd class scholarship of Nanjing Medical University

2010-2011: Young Outstanding Paper Award of the 8th Cardiovascular Science

Symposium across the strait, Yinchuan, China

2010-2011: Awarded 2nd class scholarship of Nanjing Medical University

2008-2009: Awarded 2nd class scholarship of Nanjing Medical University and the “merit

student” of Nanjing Medical University

2007-2008: Awarded 2nd class scholarship of Nanjing Medical University and the

“outstanding student leader” of Nanjing Medical University

2006-2007: Awarded as the “excellent intern”

2005-2006: Awarded 3rd class scholarship of Nanjing Medical University

2004-2005: Awarded 2nd class scholarship of Nanjing Medical University and the “merit

student” of Nanjing Medical University

1. **Scholarly Activities:**

Ad hoc Reviewer:

American Heart Association Scientific Sessions: Invited abstract reviewer

Circulation

American Journal of Physiology-Regulatory, Integrative and Comparative Physiology

American Journal of Physiology -Heart and Circulatory Physiology

American Journal of Physiology - Endocrinology and Metabolism

Atherosclerosis

Translational Research

Plos One

Pharmacology

1. **Selected peer-reviewed publications**

Kaixiang Cao, Tiejun Zhang, Zou Li, Mingchuan Song, Anqi Li, Jingwei Yan, Shuai Guo, Litao Wang, Shuqi Huang, Ziling Li, Wenzhong Hou, Xiaoyan Dai, Yong Wang, Du Feng, Jun He, Xiaodong Fu, **Yiming Xu**. Glycolysis and de novo fatty acid synthesis cooperatively regulate pathological vascular smooth muscle cell phenotypic switching and neointimal hyperplasia. The Journal of Pathology. 2023 Jan 14. doi: 10.1002/path.6052 (Corresponding author)

Hao Liu, Hualin Fan, Pengcheng He, Haixia Zhuang, Xiao Liu, Meiting Chen, Wenwei Zhong, Yi Zhang, Cien Zhen, Yanling Li, Huilin Jiang, Tian Meng, **Yiming Xu**, Guojun Zhao, Du Feng. Prohibitin 1 regulates mtDNA release and downstream inflammatory responses. EMBO J. 2022 Dec 15;41(24):e111173. doi: 10.15252/embj.2022111173

Shunchi Zhang, Yanrou Bei, Yueling Huang, Yimin Huang, Lianjie Hou, Xi-Long Zheng, **Yiming Xu**, Shaoguo Wu, Xiaoyan Dai. Induction of ferroptosis promotes vascular smooth muscle cell phenotypic switching and aggravates neointimal hyperplasia in mice. Mol Med. 2022 Oct 3;28(1):121. doi: 10.1186/s10020-022-00549-7.

Shuai Guo, Anqi Li, Xiaodong Fu, Zou Li, Kaixiang Cao, Mingchuan Song, Shuqi Huang, Ziling Li, Jingwei Yan, Litao Wang, Xiaoyan Dai, Du Feng, Yong Wang, Jun He, Yuqing Huo, **Yiming Xu**. Gene-dosage effect of Pfkfb3 on monocyte/macrophage biology in atherosclerosis. British Journal of Pharmacology 2022 Nov;179(21):4974-4991 (Corresponding author)

Jingwei Yan, Anqi Li, Xianglin Chen, Kaixiang Cao, Mingchuan Song, Shuai Guo, Zou Li, Shuqi Huang, Ziling Li, Danghan Xu, Yong Wang, Xiaoyan Dai, Du Feng, Yuqing Huo, Jun He, **Yiming Xu**. Glycolysis inhibition ameliorates brain injury after ischemic stroke by promoting the function of myeloid-derived suppressor cells. Pharmacol Res. 2022 Apr 6;179:106208 (Corresponding author)

Li-tao Wang, Peng-cheng He, An-qi Li, Kai-xiang Cao, Jing-wei Yan, Shuai Guo, Lei Jiang, Lin Yao, Xiao-yan Dai, Du Feng, **Yi-ming Xu**, Ning Tan. Caffeine promotes angiogenesis through modulating endothelial mitochondrial dynamics. Acta Pharmacologica Sinica 2021 0, 1-13 (Corresponding author)

Yong Wang, **Yiming Xu**, Siyuan Yan, Kaixiang Cao, Xianqiu Zeng, Yaqi Zhou, Zhiping Liu, Qiuhua Yang, Yue Pan, Xiaoling Wang, Detlev Boison, Yunchao Su, Xuejun Jiang, Vijay S Patel, David Fulton, Neal L. Weintraub, Yuqing Huo. Adenosine kinase is critical for neointima formation after vascular injury by inducing aberrant DNA hypermethylation. Cardiovascular Research 2021 Feb 1; 117(2): 561-575 (Corresponding author)

Bin Wen, Yuan-Ye Dang, Su-Hua Wu, Yi-Min Huang, Kong-Yang Ma, **Yi-Ming Xu**, Xi-Long Zheng, Xiao-Yan Dai. Antiatherosclerotic effect of dehydrocorydaline on ApoE-/- mice: inhibition of macrophage inflammation. Acta Pharmacol Sin. 2022 Jun;43(6):1408-1418

Guodong Zheng, Jiahui Zheng, Le Xiao, Tongyi Shang, Yanjun Cai, Yuwei Li, **Yiming Xu**, Xiaoming Chen, Yun Liu, Bin Yang. Construction of a Phenylboronic Acid-Functionalized Nano-Prodrug for pH-Responsive Emodin Delivery and Antibacterial Activity. ACS Omega. 2021 Mar 18;6(12):8672-8679

Ziqiang Wu, Huan Yao, Huan Xu, Yang Wang, Wangming Hu, Guanhua Lou, Lingling Zhang, Cong Huang, Cen Jiang, Shiyi Zhou, Yaping Shi, Xiongbing Chen, Lan Yang, **Yiming Xu**, Yong Wang. Inhibition of eNOS by L-NAME resulting in rat hind limb developmental defects through PFKFB3 mediated angiogenetic pathway. Sci Rep. 2020 Oct 7;10(1):16754

Xiaoyan Xie, Danghan Xu, Lixing Zhuang, Hui Liu, Sui Tan, Yanqing Lu, Meiyi Su, Jie Chen, Haihua Pan, Lu Lu, **Yiming Xu**, Muxi Liao, Zhanqiong Xu, Jun He. Sanfu herbal patch applied at acupoints in patients with bronchial asthma: study protocol for a randomized controlled trial. Trials. 2020 Jul 29;21(1):684

Guanhua Lou, Wangming Hu, Ziqiang Wu, Huan Xu, Huan Yao, Yang Wang, Qinwan Huang, Baojia Wang, Li Wen, Daoying Gong, Xiongbing Chen, Yaping Shi, Lan Yang, **Yiming Xu**, Yong Wang. Tanshinone II A attenuates vascular remodeling through klf4 mediated smooth muscle cell phenotypic switching. Sci Rep. 2020 Aug 17;10(1):13858

Huan Yao, Ziqiang Wu, **Yiming Xu**, Huan Xu, Guanhua Lou, Qing Jiang, Weichuan Fan, Weiming Liu, Chuan Zheng, Yongxiang Gao, Yong Wang. Andrographolide attenuates imbalance of gastric vascular homeostasis induced by ethanol through glycolysis pathway. Sci Rep. 2019 Mar 21;9(1):496

Jiean Xu, Qiuhua Yang, Xiaoyu Zhang, Zhiping Liu, Yapeng Cao, Lina Wang, Yaqi Zhou, Xianqiu Zeng, Qian Ma, **Yiming Xu**, Yong Wang, Lei Huang, Zhen Han, Tao Wang, David Stepp, Zsolt Bagi, Chaodong Wu, Mei Hong, Yuqing Huo. Endothelial adenosine kinase deficiency ameliorates diet-induced insulin resistance. J Endocrinol. 2019 Aug;242(2):159-172

Hao Liu, Xiao Liu, Haixia Zhuang, Hualin Fan, Dongxing Zhu, **Yiming Xu**, Pengcheng He, Jinbao Liu, Du Feng. Mitochondrial Contact Sites in Inflammation-Induced Cardiovascular Disease. Front Cell Dev Biol. 2020 Jul 30;8:692

Wen Li, Pengcheng He, Yuge Huang, Yi-Fang Li, Jiahong Lu, Min Li, Hiroshi Kurihara, Zhuo Luo, Tian Meng, Mashun Onishi, Changle Ma, Lei Jiang, Yongquan Hu, Qing Gong, Dongxing Zhu, **Yiming Xu**, Rong Liu, Lei Liu, Cong Yi, Yushan Zhu, Ningfang Ma, Koji Okamoto, Zhiping Xie, Jinbao Liu, Rong-Rong He, Du Feng. Selective autophagy of intracellular organelles: recent research advances. Theranostics. 2021 Jan 1;11(1):222-256

Jianhong Xia, Zhongxuan Meng, Hongyue Ruan, Wenguang Yin, **Yiming Xu**, Tiejun Zhang. Heart Development and Regeneration in Non-mammalian Model Organisms. Front. Cell Dev. Biol 2020; 8: 595488 (Corresponding author)

Yongquan Hu, Hao Chen, Luying Zhang, Xiaoying Lin, Xia Li, Haixia Zhuang, Hualin Fan, Tian Meng, Zhengjie He, Haofeng Huang, Qing Gong, Dongxing Zhu, **Yiming Xu**, Pengcheng He, Longxuan Li, Du Feng. The AMPK-MFN2 Axis Regulates MAM Dynamics and Autophagy Induced by Energy Stresses. Autophagy 2020, 19; 1-15

Ziqiang Wu, Huan Xu, **Yiming Xu**, Weichuan Fan, Huan Yao, Yang Wang, Wangming Hu, Guanhua Lou, Yaping Shi, Xiongbing Chen, Lan Yang, Li Wen, Han Xiao, Baojia Wang, Youjun Yang, Weiming Liu, Xianli Meng, Yong Wang. Andrographolide promotes skeletal muscle regeneration after acute injury through epigenetic modulation. European Journal of Pharmacology 2020 888, 173470 (Co-first author)

Yapeng cao, Xiaoyu Zhang, Lina wang, Qiuhua Yang, Qian Ma, Jiean Xu, Jingjing Wang, Laszlo Kovacs, Ramon J. Ayon, Zhiping Liu, Min zhang, Yaqi Zhou, Xianqiu zeng, **Yiming Xu**, Yong wang, David J. R. Fulton, Neal L. Weintraub, Rudolf Lucas, Zheng Dong, Jason X.-J. Yuan, Jennifer C. Sullivan, Louise Meadows, Scott A. Barman, Chaodong Wu, Junmin Quan, Mei Hong, Yunchao Su, Yuqing Huo. PFKFB3-mediated endothelial glycolysis promotes pulmonary hypertension. Proceedings of the National Academy of Sciences of the United States of America. 2019, 116 (27): 13394-13403

Yaqi Zhou, Xianqiu Zeng, Ge Li, Qiuhua Yang, Jiean Xu, Min Zhang, Xiaoxiao Mao, Yapeng Cao, Lina Wang, **Yiming Xu**, Yong Wang, Yu Zhang, Zhengshuang Xu, Chaodong Wu, Jiang-Fan Chen, Md Nasrul Hoda, Zhiping Liu, Mei Hong, Yuqing Huo. Inactivation of endothelial adenosine A2A receptors protects mice from cerebral ischaemia-induced brain injury. British Journal of Pharmacology. 2019, 176(13): 2250-2263

Min Zhang, Xianqiu Zeng, Qiuhua Yang, Jiean Xu , Zhiping Liu, Yaqi Zhou, Yapeng Cao, Xiaoyu Zhang, Xiaofei An, **Yiming Xu**, Lei Huang, Zhen Han, Tao Wang, Chaodong Wu, David J. Fulton, Neal L. Weintraub, Mei Hong, Yuqing Huo. Ablation of Myeloid ADK (Adenosine Kinase) Epigenetically Suppresses Atherosclerosis in ApoE−/− (Apolipoprotein E Deficient) Mice. Arteriosclerosis, Thrombosis and Vascular Biology. 2018; 38:2780–2792

Qiuhua Yang, Jiean Xu, Qian Ma, Zhiping Liu, Varadarajan Sudhahar, Yapeng Cao, Lina

Wang,Xianqiu Zeng, Yaqi Zhou, Min Zhang, **Yiming Xu**, Yong Wang, Neal L. Weintraub,

Chunxiang Zhang, Tohru Fukai, Chaodong Wu, Lei Huang, Zhen Han, Tao Wang, David J. Fulton, Mei Hong, Yuqing Huo. PRKAA1/AMPKα1-driven glycolysis in endothelial cells

exposed to disturbed flow protects against atherosclerosis. Nature Communications. 2018 Nov 7;9(1):4667

**Yiming Xu**, Yong Wang, Siyuan Yan, Qiuhua Yang, Yaqi Zhou, Xianqiu Zeng, Zhiping Liu, Xiaofei An, Haroldo A Toque, Zheng Dong, Xuejun Jiang, David J Fulton, Neal L Weintraub, Qinkai Li, Zsolt Bagi, Mei Hong, Detlev Boison, Chaodong Wu, Yuqing Huo. Regulation of endothelial intracellular adenosine via adenosine kinase epigenetically modulates vascular inflammation. Nature Communications. 2017 Oct 16;8(1):943 (Corresponding author)

**Yiming Xu**, Yong Wang, Siyuan Yan, Yaqi Zhou, Qiuhua Yang, Yue Pan, Xianqiu Zeng, Xiaofei An, Zhiping Liu, Lina Wang, Jiean Xu, Yapeng Cao, David J Fulton, Neal L Weintraub, Zsolt Bagi, Md Nasrul Hoda, Xiaoling Wang, Qinkai Li, Mei Hong, Xuejun Jiang, Detlev Boison, Christian Weber, Chaodong Wu, Yuqing Huo. Intracellular adenosine alters epigenetic programmingin endothelial cells to promote angiogenesis. Embo Molecular Medicine. 2017 Sep;9(9):1263-1278 (Corresponding author)

**Yiming Xu**, et al. Endothelial 6-phosphofructo-2-kinase (PFKFB3) plays a critical role in angiogenesis. Arteriosclerosis, Thrombosis and Vascular Biology. 2014, 34(6):1231-9 (First author)

**Yiming Xu**, et al. Class A Scavenger Receptor Promotes Cerebral Ischemic Injury by Pivoting Microglia/macrophage Polarization. Neuroscience. 2012,218:35-48 (First author)

Zhiping Liu , Siyuan Yan , Jiaojiao Wang , **Yiming Xu** , Yong Wang , Shuya Zhang ,Xizhen Xu , Qiuhua Yang , Xianqiu Zeng , Yaqi Zhou , Xuejiao Gu , David Fulton , NealWeintraub , Ruth Caldwell , Wenbo Zhang , Chaodong Wu , Xiao-Ling Liu , Jiang-FanChen , Aftab Ahmad , Ismail Kaddour-Djebbar , Mohamed Al-Shabrawey , AkritSodhi ,Xuejun Jiang , Qinkai Li , Mei Hong, Yuqing Huo. Endothelial adenosine receptor2A-mediated glycolysis is essential for pathological retinal angiogenesis. Nature Communications. 2017 Sep 19;8(1):584.

Lin Yao, Anil Bhatta, Zhimin Xu, Jijun Chen, Haroldo Toque, **Yiming Xu**, ZsoltBagi, Rudolf Lucas, Yuqing Huo, Ruth Caldwell, and Robert Caldwell. Obesity-induced vascular inflammation involves elevated arginase activity. Am J Physiol-Regulatory, Integrative and Comparative Physiology.2017 Nov 1;313(5):R560-R571

Ursula S. Sandau, Mariana Colino-Oliveira, Abbie Jones, Shayla Q. Coffman, Long Liu,Catarina Miranda-Lourenço, CátiaPalminha, Vânia L. Batalha, **Yiming Xu**, Yuqing Huo,Maria J. Diógenes, Ana M. Sebastião, DetlevBoison. Adenosine kinase deficiency in the brain results in maladaptive synaptic plasticity. Journal of Neuroscience. 2016,36(48):12117-12128

Yusi Wang, Paramita Pati, **Yiming Xu**, Feng Chen, David W Stepp, Yuqing Huo, R.Daniel Rudic, David J Fulton. Endotoxin Disrupts Circadian Rhythms in Macrophages via Reactive Oxygen Species. Plos One. 2016, 11(5):e0155075

Ke Ma, **Yiming Xu**, Chenchen Wang, Nan Li, Kexue Li, Yan Zhang, Xiaoyu Li, QingYang, Qin Jiang, Yong Xu, Qi Chen. A crosstalk between class A scavenger receptor and receptor for advanced glycation end-products contributes to diabetic retinopathy. Am J Physiol Endocrinal Metab. 2014, 307(12):E1153-65

Qian L, Li X, Fang R, Wang Z, **Xu Y**, Zhang H, Bai H, Yang Q, Zhu X, Ben J, Xu Y, Chen Q. Class A scavenger receptor deficiency augments angiotensin II-induced vascular remodeling. Biochem Pharmacol. 2014, 90(3):254-64

Woo SL, Xu H, Li H, Zhao Y, Hu X, Zhao J, Guo X, Guo T, Botchlett R, Qi T, Pei Y,Zheng J, **Xu Y**, An X, Chen L, Chen L, Li Q, Xiao X, Huo Y, Wu C. Metformin Ameliorates Hepatic Steatosis and Inflammation without Altering Adipose Phenotype in Diet-Induced Obesity. Plos one 2014, 9(3):e91111

Xiaozheng Zhong, Xiaoyu Li, Lingling Qian, **Yiming Xu**, Yan Lu, Jing Zhang, Qi Chen. Glycine attenuates myocardial ischemia-reperfusion injury by inhibiting myocardial apoptosis in rats. Journal of Biomedical Research 26(2012) 346-54.

Wenli Zhang, Jin Li, Jianping Liu, Zimei Wu, **Yiming Xu**, Ji Wang. Tanshinone IIA loaded reconstituted high density lipoproteins: Atherosclerotic plaque targeting mechanism in foam cell model and pharmacokinetics in rabbits. PHARMAZIE 67 (2012)324-330

Yulong Hu, Hanwen Zhang, Yan Lu, Hui, Bai, **Yiming Xu**, Xudong Zhu, Rongmei Zhou,Jingjing Ben, Yong Xu & Qi Chen. Class A scavenger receptor attenuates myocardial infarction-induced cardiomyocyte necrosis through suppressing M1 macrophage subset polarization. Basic Research in Cardiology 106 (2011) 1311-1328

Zhang WL, Xiao Y, Liu JP, Wu ZM, Gu X, **Xu YM**, Lu H. Structure and remodeling behavior of drug-loaded high-density lipoproteins and their atherosclerotic plaque targeting mechanism in foam cell model. Int J Pharm 419 (2011) 314-321

Xiao Gu, Wenli Zhang, Jianping Liu, John P. Shaw, Yuanjun Shen, **Yiming Xu**, Hui Lu and Zimei Wu. Preparation and Characterization of a Lovastatin-Loaded Protein-Free Nanostructured Lipid Carrier Resembling High-Density Lipoprotein and Evaluation of its Targeting to Foam Cells. AAPS PharmSciTech 12 (2011) 1200-1208

Xiaohua Wang , Yuan Zheng , **Yiming Xu**, Jingjing Ben , Song Gao , Xudong Zhu ,YanZhuang , Shen Yue , Hui Bai , Yaoyu Chen , Li Jiang , Yong Ji , Yong Xu , Leming Fan ,Jiahao Sha , Zhigang He , Qi Chen. A novel peptide binding to the cytoplasmic domain of class A scavenger receptor reduces lipid uptake in THP-1 macrophages. Biochimica etBiophysica Acta 1791 (2009) 76-83

1. **Publications under review**

A Metabolic Basis for Endothelial NLRP3 Inflammasome in Atherosclerosis. Cardiovascular Research

Glycolysis Orchestrates Epigenetic Changes with Endothelial-to-Mesenchymal Transition in Ang II-induced Aortic Remodelling. Ebiomedicine

1. **Meeting abstracts and presentations**

Zhiping Liu, Siyuan Yan, Jiaojiao Wang, Yong Wang, **Yiming Xu**, Qiuhua Yang,

Qinkai Li, Mei Hong, Yuqing Huo.Adenosine Receptor 2A-mediated endothelial

glycolysis critically contributes to pathological angiogenesis of retina. ATVB/PVD

scientific sessions, 2016 (Poster)

**Yiming Xu**, Siyuan Yan, Yong Wang, Xiaofei An, Qinkai Li, Chaodong Wu,Yuqing Huo.

Endothelial intracellular adenosine epigenetically regulates angiogenesis. *ATVB/PVD*

*scientific sessions, 2015* (**Travel grant, Best Of AHA Specialty Conference**) (**Invited**

**for representation in AHA Scientific Sessions, 2015**) (**Oral**)

Yong Wang, **Yiming Xu**, Siyuan Yan, Zhiping Liu, Yaqi Zhou, Xianqiu Zeng, Yuqing Huo.

PFKFB3 mediated glycolysis in vascular smooth muscle cells is essential for arterial

neointima formation. *ATVB/PVD scientific sessions, 2015* (**Travel grant**)

(**E-poster**)

**Yiming Xu**, Yong Wang, Siyuan Yan, Yaqi Zhou, Zhiping Liu, Xianqiu Zeng, Neal L.

Weintraub, Yuqing Huo Elevated intracellular adenosine epigenetically regulates

endothelial inflammation. *AHA scientific sessions, 2015* (**Travel award, Best of Basic**

**Research Abstract, Early Career Networking Reception Abstract**) (**Oral and poster**)

Yong Wang, **Yiming Xu**, Xianqiu Zeng, Yaqi Zhou, Zhiping Liu, Chaodong Wu, Qinkai Li,

Yuqing Huo. Intracellular adenosine suppresses vsmc phenotypic switch through Klf4

gene methylation. *AHA scientific sessions, 2015* (**Travel award**) (**E-abstract**)

1. **Research Support**

**Ongoing Research Supports**

82270433 (**PI: Yiming Xu**) 01/01/2023 – 12/31/2026

Natural Science Foundation of China

Title: The role of myeloid PFKFB3 in atherosclerosis

Goal(s): The aims of this project are to uncover a novel and compelling

metabolic-epigenetic coupling mechanism in endothelial NLRP3 inflammasome activation

in the setting of atherosclerosis.

81870217 (**PI: Yiming Xu**) 01/01/2019 – 12/31/2022

Natural Science Foundation of China

Title: Crosstalk between endothelial PFKFB3-mediated glycolysis and hexosamine

biosynthetic pathway in vascular homeostasis: implications for atherosclerosis

Goal(s): The aims of this project are to define the exact role of PFKFB3-driven glycolysis

in vascular inflammation and vessel dilation as well as whether the crosstalk between

glycolysis and HBP affects the vascular inflammation and vessel dilation.

2019YFE0119400 (**co-PI: Yiming Xu**) 12/15/2019 – 12/14/2023

National Key R&D Program of China

Title: The role of hypoxia in RNA modification in the development of pulmonary vascular

disease

Goal(s): The aims of this project are to define the exact role of hypoxia in the expression of

microRNA profile in the development of pulmonary hypertension

.

**Completed Research Support**

81700395 (**PI: Yiming Xu**) 01/01/2018 – 12/31/2020

Natural Science Foundation of China

Title: The role of myeloid PFKFB3 in atherosclerosis

Goal(s): The aims of this project are to study the role of PFKFB3-driven glycolysis in

hypercholesterolemia-induced monocytosis and monocyte recruitment as well as the

formation of atherosclerotic lesions.

2018KZDXM053 (**PI: Yiming Xu**) 01/01/2019 – 12/31/2021

The Key Project of Department of Education of Guangdong Province

Title: The role of smooth muscle ADK in neointima formation

Goal(s): The aims of this project are to study the role of ADK in vascular smooth muscle

cell phenotypic switching and neointima formation as well as the epigenetic mechanisms.

15POST22810024 (**PI: Yiming Xu**) 01/01/2015 – 12/31/2016

Postdoctoral fellowship from AHA

Title: The role of myeloid PFKFB3 in atherosclerosis

Goal(s): The aims of this project are to study the role of PFKFB3-driven glycolysis in

hypercholesterolemia-induced monocytosis and monocyte recruitment as well as the

formation of atherosclerotic lesions.

JX22013103 (**PI: Yiming Xu**) 07/01/2010 – 06/30/2012

College graduates innovative research plan of Jiangsu province

Title: The role of class A scavenger receptor in cerebral ischemia

Goal(s): The aims of this project are to study the role of class A scavenger receptor in

the regulation of macrophage/microglia activation and polarization as well as the

cerebral ischemic injury.

5RO1 HL095556-03 (PI: Huo, Yuqing) 08/08/2011 – 11/30/2015

NIH/NHLBI

Title: The role of adenosine kinase in atherosclerosis

Goal(s): The aims of this project are to study the role of adenosine kinase in the

regulation of activation of endothelial cells and macrophages as well as the formation of

atherosclerotic lesions.

Role: Postdoctoral Fellow