

**GUIFU WU**

---

**EDUCATION & TRAINING:**

S.NO	Institution	Degree	Year of Completion
1	Luzhou Medical College	M.D	1987
2	Sun Yat-sen University	Master degree	1994
3	Sun Yat-sen University	PhD	2000
4	Beth Israel Deaconess Medical Center	Postdoc, Research fellow	2004

**POSITION HELD:**

S.NO	Position	Institution	Year
1	Director	Cardiovascular Medicine	2019 – Present
2	Director	Guangdong Innovative Engineering and Technology Research Center for Assisted Circulation	2019 – Present
3	Co-director	The Key Lab of Assisted Circulation, Ministry of Health, China	2019 - Present
4	Co-President	The Eighth Affiliated Hospital of Sun Yat-sen University	2012 – 2019
5	Director	Heart Center	2012 – 2014
6	Co-director	The Key Lab of Assisted Circulation, Ministry of Health, China	2012 – 2014
7	Director	Cardiovascular Research Center	2004 – 2012
8	Director	Clinical Center of Enhanced External Counterpulsation	2004 – 2012
9	Co-director	The Key Lab of Assisted Circulation, Ministry of Health, China	2004- 2012
10	Co-president	EECP Association China	2004 – 2012
11	Co-directors	Chinese Heart Failure Association	2004 – 2012
12	Member	Cardiovascular Society, Chinese Medical Association	2004 - 2012

## **ACADEMIC POSITIONS:**

Vice-president, International EECP Society  
President, EECP Branch of Chinese Society of Bio-Medical Engineering  
Co-director, Cardio-pulmonary Rehabilitation Branch of Chinese Medical Doctor Association  
Committeeman, Cardiovascular Branchof Chinese Medical Doctor Association  
Standing Committee Member, Cardiovascular Rehabilitation Branch of Chinese Society of Rehabilitation  
Standing Committee Member, Society of Chinese Chest Pain Center

## **RESEARCH INTERESTS:**

### **Field of Medicine**

1. Cellular and genetic therapy of cardiovascular disease.
2. The diagnosis and treatment strategy of coronary abnormal dilation and slow flow phenomenon.
3. The diagnosis and treatment strategy of vascular endothelium dysfunction syndrome.

### **Field of Medical Bio-engineering**

1. Application and Technology Development of EECP.
2. Development of cardiovascular circulation assisting device.
3. Hemodynamic and cardiovascular system model construction and computer model research.

## **SELECTED PUBLICATIONS**

1. Wang C(#), Xu G(#), Wen Q, Peng X, Chen H, Zhang J, Xu S, Zhang C, Zhang M, Ma J, Hui Z, **Wu G(\*)**, Ma M(\*). CBS promoter hypermethylation increases the risk of hypertension and stroke. Clinics (Sao Paulo). 2019;74:e630.
2. Fan, Wendong, Fang, Rong, Wu, Xiaoyuan, Liu, Jia, Feng, Mingzhe, Dai, Gang, Chen, Guojun, **Wu, Guifu(\*)**, Shear-sensitive microRNA-34a modulates flow-dependent regulation of endothelial inflammation., Journal of Cell Science, 2015, 128 (1): 70-80.
3. Wu, Xiao-Yuan(#), Fan, Wen-Dong(#), Fang, Rong, Wu, **Gui-Fu(\*)**, Regulation of microRNA-155 in endothelial inflammation by targeting nuclear factor (NF)-kappaB P65., Journal of Cellular Biochemistry, 2014, 115 (11): 1928-1936.
4. Liu, Jia(#), Li, Weiqiang(#), Wang, Yinfen, Fan, Wendong, Li, Panlong, Lin,

- Wanyi, Yang, Daya, Fang, Rong, Feng, Mingzhe, Hu, Chengheng, Du, Zhimin, **Wu, Gui-fu(\*)**, Xiang, Andy Peng(\*), Islet-1 Overexpression in Human Mesenchymal Stem Cells Promotes Vascularization Through Monocyte Chemoattractant Protein-3, *Stem Cells*, 2014, 32 (7): 1843-1854.
5. Xiong, Yan(#), Ren, Yu-feng, Xu, Jia(#), Yang, Da-ya(#), He, Xiao-hong, Luo, Jing-yun, Rana, Jamal S., Zhang, Yan, Zheng, Zhen-sheng, Liu, Dong-hong(\*), **Wu, Gui-fu(\*)**, Enhanced external counterpulsation inhibits endothelial apoptosis via modulation of BIRC2 and Apaf-1 genes in porcine hypercholesterolemia, *International Journal of Cardiology*, 2014, 171 (2): 161-168.
6. Yang, Da-ya, **Wu, Gui-fu(\*)**, Vasculoprotective properties of enhanced external counterpulsation for coronary artery disease: Beyond the hemodynamics, *International Journal of Cardiology*, 2013, 166 (1): 38-43.
7. Hu, Cheng-heng, Ke, Xiao, Chen, Kui, Yang, Da-ya, Du, Zhi-min, **Wu, Gui-fu(\*)**, Transplantation of human umbilical cord-derived endothelial progenitor cells promotes re-endothelialization of the injured carotid artery after balloon injury in New Zealand white rabbits., *Chinese Medical Journal*, 2013, 126 (8): 1480-1485.
8. Chen K, Fan W, Wang X, Ke X, **Wu G(\*)**, Hu C(\*), MicroRNA-101 mediates the suppressive effect of laminar shear stress on mTOR expression in vascular endothelial cells, *BiochemBiophys Res Commun*, 2012, 427 (1): 138-142.
9. Luo, Chufan(#), Liu, Donghong(#), Du, Zhimin, Barsness, Gregory W., Wu, Xing, Hu, Chengheng, Li, Yi, Hu, Xun, Zhang, Yan, **Wu, Gui-fu(\*)**, Short-term effects of enhanced external counterpulsation on transthoracic coronary flow velocity and reserve in patients with coronary slow flow, *International Journal of Cardiology*, 2012, 154 (1): 84-85.
10. Chengheng Hu , Zhiming Li , Zhimin Du , Aixia Zhang , Jamal S Rana, Donghong Liu , Daya Yang , **GuifuWu(\*)** , Expanded Human Cord Blood-derived Endothelial Progenitor Cells Salvage Infarcted Myocardium in

Rat with Acute Myocardial Infarction, ClinExpPharmacolPhysiol, 2010, 37 (5-6): 551-556.

11. Hu Chengcheng, Li Zhiming, Du Zhimin, Zhang Aixia, Yang Daya, **Wu Guifu(\*)**, Human umbilical cord-derived endothelial progenitor cells promote growth cytokines- mediated neorevascularization in rat myocardial infarction, Chin Med J (Engl), 2009, 122 (5): 548-555.
12. Zhang Yan, He Xiaohong, Chen Xiaolin, Ma Hong(\*), Liu Donghong, Luo, Jinyun, Du, Zhimin, Jin, Yafei, Xiong, Yan, He, Jiangui, Fang, Dianqiu, Wang, Kuijian, Lawson, William E., Hui, John C. K., Zheng, Zhenheng, **Wu, Guifu(\*)**, Enhanced external counterpulsation inhibits intimal hyperplasia by modifying shear stress-responsive gene expression in hypercholesterolemic pigs, Circulation, 2007, 116 (5): 526-534
13. Wu X#\*, Yang D, Fan W, Fan C, Wu G. Cardiovascular Risk Factors in Noise-Exposed Workers in China: Small Area Study, Noise Health, 2017, 19(91): 245-253.
14. Du JH#\*, Huang L, Wu GF, Zheng ZS, Feng MZ, Dai G, Wu FJ. Enhanced external Counterpulsation Treatment Inhibiting Advanced Atherosclerotic Plaque Progression by Augmenting the Plaque Wall Stress: An in vivo FSI study Based on Animal Experiment. Chinese Journal of Biomedical Engineering, 2016, 25(1): 1-22
15. Du JH#\*, Wu GF, Zheng ZS, Dai G, Feng MZ. Enhanced External Counterpulsation Inducing Arterial Hemodynamic Variations and Its Chronic Effect on Endothelial Function. Chinese Journal of Biomedical Engineering, 2014, 3:127-138
16. SayedNour(#)(\*), Daya Yang, Gong Dai, Qinmei Wang, MinzeFeng, Nermine Lila, Juan Carlos Chachques, Guifu Wu, Intrapulmonary shear stress enhancement: A new therapeutic approach in acute myocardial ischemia, International Journal of Cardiology, 2013, 168 (4): 4199-4208.
17. Hu, Chun-Lin, Liu, Rong, Liao, Xiao-Xing, Wei, Hong-Yan, Li, Xin(\*), Zhan,

- Hong, Jing, Xiao-Li, Xiong, Yan, Huang, Guo-Qing, Wu, Gui-Fu, Early Enhanced External Counter Pulsation Improves Neurological Recovery After the Return of Spontaneous Circulation in a Mongrel Dog Cardiac Arrest Model, Critical Care Medicine, 2013, 41 (6): E62-E73.
18. Nour, Sayed(\*), Dai, Gang, Carbognani, Daniel, Feng, Minze, Yang, Daya, Lila, Nermine, Chachques, Juan Carlos, Wu, Guifu, Intrapulmonary Shear Stress Enhancement: A New Therapeutic Approach in Pulmonary Arterial Hypertension, Pediatric Cardiology, 2012, 33 (8): 1332-1342.
19. Luo, Chufan, Liu, Donghong, Wu, Guifu, Hu, Chengheng, Zhang, Yan, Du, Zhimin(\*), Dong, Yugang(\*), Effect of Enhanced External Counterpulsation on Coronary Slow Flow and Its Relation with Endothelial Function and Inflammation: A Mid-Term Follow-Up Study, Cardiology, 2012, 122 (4): 260-268.
20. WeiqiangLi(#), Chang Liu(#), Jie Qin, Li Zhang, Rui Chen, Jing Chen, Xinbing Yu, Guifu Wu, Bruce T. Lahn, Yongshui Fu(\*), Andy Peng Xiang(\*), Efficient Genetic Modification of Cynomolgus Monkey Embryonic Stem Cells With Lentiviral Vectors, Cell Transplantation, 2010, 19 (9): 1181-1193.
21. Zhang, Yan(#), He, Xiaohong, Liu, Donghong, Wu, Guifu, Chen, Xiaolin, Ma, Hong(\*), Du, Zhimin, Dong, Yugang, Jin, Yafei, He, Wen, Wang, Kuijian, Lawson, William E., Hui, John C. K., Zheng, Zhensheng, Enhanced External Counterpulsation Attenuates Atherosclerosis Progression Through Modulation of Proinflammatory Signal Pathway, Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30 (4): 773-U298.
22. Zhang, Xuan, Pan, Shi-Rong (\*), Hu, Hai-Mei, Wu, Gui-Fu, Feng, Min, Zhang, Wei, Lu, Xin, Poly(ethylene glycol)-block-polyethylenimine copolymers as carriers for gene delivery: Effects of PEG molecular weight and PEGylation degree, Journal of Biomedical Materials Research Part A, 2008, 84A (3): 795-804.
23. Voisine, Pierre, Rosinberg, Audrey, Wykrzykowska, Joanna J., Shamis, Yulia,

- Wu, Gui Fu, Appelbaum, Evan, Li, Jian, Sellke, Frank W., Pinto, Duane, Gibson, C. Michael , Mitrani, Eduardo , Laham, Roger J. , Skin-derived microorganautotransplantation as a novel approach for therapeutic angiogenesis , American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294 (1): H213-H219.
24. Akhtar, Mateen, Wu, Gui-Fu, Du, Zhi-Min, Zheng, Zhen-Sheng, Michaels, Andrew D., Effect of external counterpulsation on plasma nitric oxide and endothelin-1 levels, American Journal of Cardiology, 2006, 98 (1): 28-30.
25. Wu, Guifu(#), Rana, Jamal S., Wykrzykowska, Joanna, Du, Zhimin, Ke, Qingen, Kang, Peter, Li, Jian, Laham, Roger J.(\*), Exercise-induced expression of VEGF and salvation of myocardium in the early stage of myocardial infarction, American Journal of Physiology-Heart and Circulatory Physiology, 2009, 296 (2): H389-H395.
26. Wu, GF(#), Luo, JC(#), Rana, JS, Laham, R, Sellke, FW, Li, J(\*), Involvement of COX-2 in VEGF-induced angiogenesis via P38 and JNK pathways in vascular endothelial cells, Cardiovascular Research, 2006, 69 (2): 512-519.
27. Wu, Guifu(#), Du, Zhimin, Hu, Chenghen, Zheng, Zhensheng, Zhan, Chengyang, Ma, Hong, Fang, Dianqiu, Ahmed, Khan Tanveer, Laham, Roger J, Hui, John C K, Lawson, William E(\*), Angiogenic effects of long-term enhanced external counterpulsation in a dog model of myocardial infarction., Am J Physiol Heart CircPhysiol, 2006, 290 (1): H248-H254.
28. Wu, Guifu(#), Mannam, Arjuna P, Wu, Jiaping, Kirbis, Simona, Shie, Jue-Lon, Chen, Christopher, Laham, Roger J, Sellke, Frank W, Li, Jian(\*), Hypoxia induces myocyte-dependent COX-2 regulation in endothelial cells: role of VEGF., Am J Physiol Heart CircPhysiol, 2003, 285 (6): H2420-H2429.
29. Fan W D, Yuan C H, Yang R, Wu GF(\*). ROLE OF LONP2 CIRCULAR RNA IN FLOW-REGULATION OF ENDOTHELIAL INFLAMMATION [J]. Journal of the American College of Cardiology, 2019, 73(9 Supplement 1): 2086.
30. Li Weijie, Wenjuan Zhou, Xiaoling Li, Huanji Zhang, Guifu Wu and Xinxia

- Zhang, GW27-e0992 Effects of Enhanced External Counterpulsation on Improving Quality of Life and Exercise Tolerance in Patients with Coronary Heart Disease, J Am CollCardiol, 2016, 68(16\_S), C168.
31. Li Weijie, Wenjuan Zhou, Xiaoling Li, Huanji Zhang, Guifu Wu and Xinxia Zhang, GW27-e0987 Effects of Enhanced External Counterpulsation on Relieving Depression and Anxiety in Patients with Coronary Heart Disease, J Am CollCardiol, 2016, 68(16\_S), C168.
32. Wendong Fan, Rong Fang, MingzheFeng, FanGang Dai, GuiFuWu(\*), Microarray expression profile of long non-coding RNAs in human endothelial cells exposed to atheroprotective shear stress, J Am CollCardiol, 2015, 66 (16\_S): C67-C67.