



Mao Zhang

Instructor, Cardiovascular Institute

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

HONORS AND AWARDS

- Career Development Award, American Heart Association (2024-2027)
- TRDRP Postdoctoral Fellowship, University of California (2022-2025)

Publications

PUBLICATIONS

- **Danhong Injection targets CaMKII through Dihydrotanshinone I to alleviate cardiomyocyte death and inflammation in viral myocarditis.** *Science China. Life sciences*
Zhang, J., Zhao, C., Zhang, W., Zhang, M., Li, F., Shang, H., Zheng, W., Li, Y., Quan, L., Li, X., Li, H., Wang, L., Wen, et al
2025
- **Novel CaMKII-delta Inhibitor Hesperadin Exerts Dual Functions to Ameliorate Cardiac Ischemia/Reperfusion Injury and Inhibit Tumor Growth.** *Circulation*
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, et al
2022
- **Targeting CaMKII-delta 9 Ameliorates Cardiac Ischemia/Reperfusion Injury by Inhibiting Myocardial Inflammation** *CIRCULATION RESEARCH*
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, et al
2022; 130 (6): 887-903
- **CaMKII-delta9 Induces Cardiomyocyte Death to Promote Cardiomyopathy and Heart Failure.** *Frontiers in cardiovascular medicine*
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- **CaMKII-delta 9 promotes cardiomyopathy through disrupting UBE2T-dependent DNA repair** *NATURE CELL BIOLOGY*
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- **CaMKII is a RIP3 substrate mediating ischemia- and oxidative stress-induced myocardial necroptosis** *NATURE MEDICINE*
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- **Central role of E3 ubiquitin ligase MG53 in insulin resistance and metabolic disorders** *NATURE*
Song, R., Peng, W., Zhang, Y., Lv, F., Wu, H., Guo, J., Cao, Y., Pi, Y., Zhang, X., Jin, L., Zhang, M., Jiang, P., Liu, et al
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- **ACTL6A regulates the Warburg effect through coordinated activation of AP-1 signaling in head and neck squamous cell carcinoma.** *bioRxiv : the preprint server for biology*
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2025
- **CRISPRi/a screens in human iPSC-cardiomyocytes identify glycolytic activation as a druggable target for doxorubicin-induced cardiotoxicity.** *Cell stem cell*
Liu, C., Shen, M., Liu, Y., Manhas, A., Zhao, S. R., Zhang, M., Belbachir, N., Ren, L., Zhang, J. Z., Caudal, A., Nishiga, M., Thomas, D., Zhang, et al
2024
- **Computational protocol to identify shared transcriptional risks and mutually beneficial compounds between diseases.** *STAR protocols*
Gao, H., Zhang, M., Baylis, R. A., Wang, F., Björkegren, J. L., Kovacic, J. J., Ruusalepp, A., Leeper, N. J.
2024; 5 (1): 102883
- **Generation and characterization of induced pluripotent stem cells from breast cancer patients carrying ATM mutations.** *Stem cell research*
Zhang, M., Venkateshappa, R., Li, A., Fowler, M. B., Telli, M. L., Wu, J. C.
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- **Generation of two induced pluripotent stem cell lines from breast cancer patients carrying BRCA2 variants.** *Stem cell research*
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- **Editorial: Nutrition and metabolism in musculoskeletal disorders.** *Frontiers in nutrition*
Zhang, M., Shan, B., Lin, S., Xu, J., Zhang, N.
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- **Glycolytic reprogramming in macrophages and MSCs during inflammation.** *Frontiers in immunology*
Li, X., Shen, H., Zhang, M., Teissier, V., Huang, E. E., Gao, Q., Tsubosaka, M., Toya, M., Kushioka, J., Maduka, C. V., Contag, C. H., Chow, S. K., Zhang, et al
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- **Deconvoluting the Cells of the Human Heart with iPSC Technology: Cell Types, Protocols, and Uses.** *Current cardiology reports*
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- **Protocol to measure contraction, calcium, and action potential in human-induced pluripotent stem cell-derived cardiomyocytes.** *STAR protocols*
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- **Human Induced Pluripotent Stem Cells as a Screening Platform for Drug-Induced Vascular Toxicity.** *Frontiers in pharmacology*
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- **Yixin-Shu Capsules Ameliorated Ischemia-Induced Heart Failure by Restoring Trx2 and Inhibiting JNK/p38 Activation** *OXIDATIVE MEDICINE AND CELLULAR LONGEVITY*
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- **Cardiac Ischemic Preconditioning Promotes MG53 Secretion Through H2O2-Activated Protein Kinase C-delta Signaling** *CIRCULATION*
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- **Programmed necrosis in cardiomyocytes: mitochondria, death receptors and beyond** *BRITISH JOURNAL OF PHARMACOLOGY*
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- **beta-arrestin 2 mediates cardiac ischemia-reperfusion injury via inhibiting GPCR-independent cell survival signalling** *CARDIOVASCULAR RESEARCH*
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