

Stanford



Mengcheng Shen

Instructor, Cardiovascular Institute

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

HONORS AND AWARDS

- NHLBI K99/R00 Pathway to Independence Award, NIH (2023/05)
- American Heart Association Career Development Award (declined due to budget conflict), American Heart Association (2023/04)
- Tobacco-Related Disease Research Program (TRDRP) Postdoctoral Fellowship, University of California, Office of the President (2019/07-2022/12)

Publications

PUBLICATIONS

- **Studying Long QT Syndrome Caused by NAA10 Genetic Variants Using Patient-Derived Induced Pluripotent Stem Cells.** *Circulation*
Belbachir, N., Wu, Y., Shen, M., Zhang, S. L., Zhang, J. Z., Liu, C., Knollmann, B. C., Lyon, G. J., Ma, N., Wu, J. C.
2023; 148 (20): 1598-1601
- **Recent advances in regulating the proliferation or maturation of human-induced pluripotent stem cell-derived cardiomyocytes.** *Stem cell research & therapy*
Yang, H., Yang, Y., Kiskin, F. N., Shen, M., Zhang, J. Z.
2023; 14 (1): 228
- **Statins improve endothelial function via suppression of epigenetic-driven EndMT.** *Nature cardiovascular research*
Liu, C., Shen, M., Tan, W. L., Chen, I. Y., Liu, Y., Yu, X., Yang, H., Zhang, A., Liu, Y., Zhao, M. T., Ameen, M., Zhang, M., Gross, et al
2023; 2 (5): 467-485
- **Protocol to generate cardiac pericytes from human induced pluripotent stem cells.** *STAR protocols*
Shen, M., Zhao, S. R., Khokhar, Y., Li, L., Zhou, Y., Liu, C., Wu, J. C.
2023; 4 (2): 102256
- **Stepwise Generation of Human Induced Pluripotent Stem Cell-Derived Cardiac Pericytes to Model Coronary Microvascular Dysfunction.** *Circulation*
Shen, M., Liu, C., Zhao, S. R., Manhas, A., Sundaram, L., Ameen, M., Wu, J. C.
2023; 147 (6): 515-518
- **Integrative single-cell analysis of cardiogenesis identifies developmental trajectories and non-coding mutations in congenital heart disease.** *Cell*
Ameen, M., Sundaram, L., Shen, M., Banerjee, A., Kundu, S., Nair, S., Shcherbina, A., Gu, M., Wilson, K. D., Varadarajan, A., Vadgama, N., Balsubramani, A., Wu, et al
2022; 185 (26): 4937
- **Generation of two induced pluripotent stem cell lines from dilated cardiomyopathy patients carrying TTN mutations.** *Stem cell research*
Zhang, T. T., Zhao, S. R., Alamana, C., Shen, M., Parikh, V., Wheeler, M. T., Wu, J. C.

2022; 65: 102941

- **Technical Applications of Microelectrode Array and Patch Clamp Recordings on Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes.** *Journal of visualized experiments : JoVE*
Zhao, S. R., Mondejar-Parreno, G., Li, D., Shen, M., Wu, J. C.
2022
- **Generation of Embryonic Origin-Specific Vascular Smooth Muscle Cells from Human Induced Pluripotent Stem Cells.** *Methods in molecular biology (Clifton, N.J.)*
Shen, M., Liu, C., Wu, J. C.
2022; 2429: 233-246
- **Generation of Vascular Smooth Muscle Cells From Induced Pluripotent Stem Cells: Methods, Applications, and Considerations.** *Circulation research*
Shen, M., Quertermous, T., Fischbein, M. P., Wu, J. C.
2021; 128 (5): 670–86
- **Generation of three induced pluripotent stem cell lines from hypertrophic cardiomyopathy patients carrying TNNI3 mutations.** *Stem cell research*
Zhao, S. R., Shen, M., Lee, C., Zha, Y., Guevara, J. V., Wheeler, M. T., Wu, J. C.
2021; 57: 102597
- **The Regulation of Endothelial Function Through Hmgcr/mevalonate Pathway Mediated Yap Activity**
Liu, C., Liu, Y., Chen, C., Ameen, M., Yang, H., Shen, M., Rhee, J., Chen, I. Y., Sayed, N., Wu, J. C.
LIPPINCOTT WILLIAMS & WILKINS.2020
- **Generation of Quiescent Cardiac Fibroblasts Derived from Human Induced Pluripotent Stem Cells.** *Methods in molecular biology (Clifton, N.J.)*
Zhang, H. n., Shen, M. n., Wu, J. C.
2020
- **Generation of Quiescent Cardiac Fibroblasts from Human Induced Pluripotent Stem Cells for In Vitro Modeling of Cardiac Fibrosis.** *Circulation research*
Zhang, H., Tian, L., Shen, M., Wu, H., Gu, M., Tu, C., Paik, D. T., Wu, J. C.
2019
- **Extracellular matrix, regional heterogeneity of the aorta, and aortic aneurysm.** *Experimental & molecular medicine*
Jana, S. n., Hu, M. n., Shen, M. n., Kassiri, Z. n.
2019; 51 (12): 160