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Instructor, Cardiovascular Institute

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

Publications

PUBLICATIONS

- **Inhibition of CXCL10 and IFN- γ ameliorates myocarditis in preclinical models of SARS-CoV-2 mRNA vaccination.** *Science translational medicine*
Cao, X., Manhas, A., Chen, Y. I., Caudal, A., Mondejar-Parreño, G., Zhu, W., Liu, W., Kong, X., Zeng, W., Liu, L., Zhao, S. R., Jahng, J. W., Utz, et al
2025; 17 (828): eadq0143
- **Tissue microenvironment dictates the state of human iPSC-derived endothelial cells of distinct developmental origin in 3D cardiac microtissues** *ISCIENCE*
Cao, X., Mircea, M., Cascione, S., Amel, A., Tsikari, T., van den Hil, F. E., Mei, H., Neumann, K., Alemany, A., Anastassiadis, K., Mummery, C. L., Semrau, S., Orlova, et al
2025; 28 (10)
- **Investigating the Risk of Arrhythmogenesis Associated With Fentanyl Abuse Using Human and Mouse Cardiomyocytes.** *Circulation*
Mondéjar-Parreño, G., Zhao, S. R., Cao, X., Liu, Y., Yang, J. Y., Jahng, J. W., Leitz, J., Wu, D., Sayed, N., Jalife, J., Wu, J. C.
2025; 152 (8): 563-566
- **Mitochondrial reactive oxygen species impact human fibroblast responses to protracted γ -ray exposures.** *International journal of radiation biology*
Whitcomb, L. A., Cao, X., Thomas, D., Wiese, C., Pessin, A. S., Zhang, R., Wu, J. C., Weil, M. M., Chicco, A. J.
2024: 1-13
- **Modeling ionizing radiation-induced cardiovascular dysfunction with human iPSC-derived engineered heart tissues.** *Journal of molecular and cellular cardiology*
Cao, X., Thomas, D., Whitcomb, L. A., Wang, M., Chatterjee, A., Chicco, A. J., Weil, M. M., Wu, J. C.
2024; 188: 105-107
- **ETV2 Upregulation Marks the Specification of Early Cardiomyocytes and Endothelial Cells During Co-differentiation** *STEM CELLS*
Cao, X., Mircea, M., Yakala, G., van den Hil, F. E., Brescia, M., Mei, H., Mummery, C. L., Semrau, S., Orlova, V. V.
2023; 41 (2): 140-152
- **Clinical Trial in a Dish for Space Radiation Countermeasure Discovery.** *Life sciences in space research*
Cao, X., Weil, M. M., Wu, J. C.
2022; 35: 140-149
- **Looking on the horizon; potential and unique approaches to developing radiation countermeasures for deep space travel.** *Life sciences in space research*

Bokhari, R. S., Beheshti, A., Blutt, S. E., Bowles, D. E., Brenner, D., Britton, R., Bronk, L., Cao, X., Chatterjee, A., Clay, D. E., Courtney, C., Fox, D. T., Gaber, et al
2022; 35: 105-112

● **Acoustic Fabrication of Living Cardiomyocyte-based Hybrid Biorobots.** *ACS nano*

Wang, J., Soto, F., Ma, P., Ahmed, R., Yang, H., Chen, S., Wang, J., Liu, C., Akin, D., Fu, K., Cao, X., Chen, P., Hsu, et al
2022

● **Generation of three induced pluripotent stem cell lines from hypertrophic cardiomyopathy patients carrying MYH7 mutations.** *Stem cell research*

Cao, X., Jahng, J. W., Lee, C., Zha, Y., Wheeler, M. T., Sallam, K., Wu, J. C.
2021; 55: 102455

● **Human-iPSC-Derived Cardiac Stromal Cells Enhance Maturation in 3D Cardiac Microtissues and Reveal Non-cardiomyocyte Contributions to Heart Disease** *CELL STEM CELL*

Giacomelli, E., Meraviglia, V., Camprostrini, G., Cochrane, A., Cao, X., van Helden, R. W. J., Garcia, A., Mircea, M., Kostidis, S., Davis, R. P., van Meer, B. J., Jost, C. R., Koster, et al
2020; 26 (6): 862-+