Stanford



Wenjuan Zhu

Instructor, Cardiovascular Institute

Bio

BIO

Postdoctoral Fellow

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- NIH Pathway to Independence Award (K99/R00), National Institutes of Health (2026/08-2031/07)
- AHA Postdoctoral Fellowship, American Heart Association (2024/01-2025/12)
- "Young Hearts" Abstract Travel Grant, American Heart Association (2022/11)
- Dragon Culture PhD Scholarships for Medical Studies, The Chinese University of Hong Kong (2022/07)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Heart Association (2018 - present)

PROFESSIONAL EDUCATION

- PhD, The Chinese University of Hong Kong , Medical Sciences (2022)

Publications

PUBLICATIONS

- **AP2B1, a protein involved in endocytic trafficking, is associated with congenital heart defects when mutated** *GENES & DISEASES*
  Guzman, C., Zhu, W., Jha, A., Tong, Y., Arrigo, A., Bahar, I., Lo, C., Lin, J.
  2026; 13 (6): 102035
- **CCN1-mediated stress signaling underlies intrinsic cardiomyocyte dysfunction in spinal muscular atrophy.** *Cell reports*
  Zeng, W., Liu, W., Caudal, A., Liu, L., Kong, X., Zhu, W., Kim, H., Lee, A., Alamana, C., Melesio, J., Cao, X., Howell, K., Chen, et al
  2026; 45 (11): 118176
- **Targeting an atypical G protein-coupled receptor signaling pathway for cardiac fibrosis therapy.** *Science (New York, N.Y.)*
  Zhang, H., Shivnaraine, R. V., Ren, L., Thai, P. N., Janicot, R., Zhu, W., Huang, R., Siepe, D. H., Tu, C., Liu, W., Maziarz, M., Deutsch, J. C., Liu, et al
  2026; 393 (6818): eaej5896
- **3-Dimensional Human iPSC-Derived Cardiac Organoids for Antifibrotic Drug Screening.** *Circulation research*
  Zhang, H., Huang, R., Thai, P. N., Ren, L., Shivnaraine, R. V., Zhu, W., Dai, Y., Liu, W., Xie, M., Liu, X., Tan, R., Yang, X., Cao, et al

2026

- **Tirzepatide Regulates Pacemaker Function by Modulating cAMP and Calcium Dynamics in Human Sinoatrial Node Cells.** *Circulation*
  Ren, L., Belbachir, N., Zhang, H., Thai, P. N., Huang, R., Zhu, W., Wu, X., Xie, M., Gao, J., Kim, H. Y., Liu, T., Sun, J., Ghazizadeh, et al
  2026; 153 (25): 2110-2113
- **KCTD1/KCTD15 Complexes Repress AP-2α and AP-2β to Regulate Neural Crest-Dependent Craniofacial Morphogenesis and Scalp Skin Development.** *The Journal of investigative dermatology*
  Raymundo, J. R., Senapati, B., Zhu, W., Lin, A. E., Vitagliano, L., Marneros, A. G.
  2026
- **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
- **Multiscale drug screening for cardiac fibrosis identifies MD2 as a therapeutic target.** *Cell*
  Zhang, H., Thai, P. N., Shivnaraine, R. V., Ren, L., Wu, X., Siepe, D. H., Liu, Y., Tu, C., Shin, H. S., Caudal, A., Mukherjee, S., Leitz, J., Wen, et al
  2024
- **Multiscale drug screening for cardiac fibrosis identifies MD2 as a therapeutic target** *Cell*
  Zhang, H.
  2024
- **Generation of two induced pluripotent stem cell lines from patients with Williams syndrome.** *Stem cell research*
  Dai, Y., Zhu, W., Flores Banuelos, A. G., Li, J., Mukherjee, S., Algaze, C., Wu, J. C.
  2024; 78: 103460
- **AP-2α/AP-2β transcription factors are key regulators of epidermal homeostasis.** *The Journal of investigative dermatology*
  Zhang, H., Raymundo, J. R., Daly, K. E., Zhu, W., Senapati, B., Zhong, H., Ahilan, A. R., Marneros, A. G.
  2024
- **KCTD1/KCTD15 complexes control ectodermal and neural crest cell functions and their impairment causes aplasia cutis.** *The Journal of clinical investigation*
  Raymundo, J. R., Zhang, H., Smaldone, G., Zhu, W., Daly, K. E., Glennon, B. J., Pecoraro, G., Salvatore, M., Devine, W. A., Lo, C. W., Vitagliano, L., Marneros, A. G.
  2023
- **AP-2α/AP-2β transcription factors are key regulators of epidermal homeostasis.** *bioRxiv : the preprint server for biology*
  Zhang, H., Raymundo, J., Daly, K. E., Zhu, W., Senapati, B., Marneros, A. G.
  2023
- **Generation of two induced pluripotent stem cell lines from patients with Down syndrome.** *Stem cell research*
  Zhu, W., Liu, W., Yu, R., Manning, M., Waran Romfh, A., Wu, J. C.
  2023; 72: 103204
- **Contribution of LRP1 in Human Congenital Heart Disease Correlates with Its Roles in the Outflow Tract and Atrioventricular Cushion Development** *GENES*
  Arrigo, A. B., Zhu, W., Williams, K. A., Guzman-Moreno, C., Lo, C., Lin, J. I.
  2023; 14 (4)
- **Uncompensated mitochondrial oxidative stress underlies heart failure in an iPSC-derived model of congenital heart disease** *CELL STEM CELL*
  Xu, X., Jin, K., Bais, A. S., Zhu, W., Yagi, H., Feinstein, T. N., Nguyen, P. K., Criscione, J. D., Liu, X., Beutner, G., Karunakaran, K. B., Rao, K. S., He, et al
  2022; 29 (5): 840-+
- **Rare and Common Variants Uncover the Role of the Atria in Coarctation of the Aorta** *GENES*
  Zhu, W., Williams, K., Young, C., Lin, J., Teekakirikul, P., Lo, C. W.
  2022; 13 (4)

- **Genetic resiliency associated with dominant lethal TPM1 mutation causing atrial septal defect with high heritability** *CELL REPORTS MEDICINE*
  Teekakirikul, P., Zhu, W., Xu, X., Young, C. B., Tan, T., Smith, A. M., Wang, C., Peterson, K. A., Gabriel, G. C., Ho, S., Sheng, Y., de Bellaing, A., Sonnenberg, et al
  2022; 3 (2): 100501

- **Single-cell transcriptome analysis yields new insights into the pathogenic mechanisms and possible genetic etiology of cardiomyopathies**
  Zhu, W., Teekakirikul, P., Guo, D., Yan, B., Lo, C.
  OXFORD UNIV PRESS.2021: 3331

- **The transcriptional landscape of the clustered protocadherins in the cardiovascular system**
  Zhu, W., Chhibbar, P., Lo, C.
  OXFORD UNIV PRESS.2021: 3202

- **Common deletion variants causing protocadherin-α deficiency contribute to the complex genetics of BAV and left-sided congenital heart disease** *HUMAN GENETICS AND GENOMICS ADVANCES*
  Teekakirikul, P., Zhu, W., Gabriel, G. C., Young, C. B., Williams, K., Martin, L. J., Hill, J. C., Richards, T., Billaud, M., Phillippi, J. A., Wang, J., Wu, Y., Tan, et al
  2021; 2 (3)

- **Genetic Architecture and Selection of Chinese Cattle Revealed by Whole Genome Resequencing** *MOLECULAR BIOLOGY AND EVOLUTION*
  Mei, C., Wang, H., Liao, Q., Wang, L., Cheng, G., Wang, H., Zhao, C., Zhao, S., Song, J., Guang, X., Liu, G. E., Li, A., Wu, et al
  2018; 35 (3): 688-699

- **Whole-genome sequencing of the endangered bovine species Gayal (Bos frontalis) provides new insights into its genetic features** *SCIENTIFIC REPORTS*
  Mei, C., Wang, H., Zhu, W., Wang, H., Cheng, G., Qu, K., Guang, X., Li, A., Zhao, C., Yang, W., Wang, C., Xin, Y., Zan, et al
  2016; 6: 19787