

Jianxiu Zhang

Postdoctoral Scholar, Molecular and Cellular Physiology

Bio

HONORS AND AWARDS

- Alzheimer's Association Research Fellowship, Alzheimer's Association (2022-2025)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Institute of Biophysics, Chinese Academy of Sciences , Biochemistry and Molecular Biology (2021)
- Bachelor of Engineering, Jilin University , Bioengineering (2015)
- Exchange student, Peking University , Biology (2013)

STANFORD ADVISORS

- Liang Feng, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=RHhfqMoAAAAJ&hl=en>
- Twitter: <https://twitter.com/jxzhang8>

Publications

PUBLICATIONS

- **Molecular insights into mitochondrial calcium extrusion**
Krishnan, A. R., Fan, M., Tsai, C., Zhang, J., Zhang, J., Tsai, M., Feng, L.
CELL PRESS.2026: 319a
- **A genetically encoded ionic-stress sensor reveals protons as a sleep driver.** *bioRxiv : the preprint server for biology*
Ji, Z., Liu, J., Wang, B., Wei, S., Bian, Y., Zeng, W., Chung, C. I., Ma, Z., Zhang, J., Shu, X., Ma, D. K.
2026
- **Diverse bacterial pattern recognition receptors sense the conserved phage proteome.** *bioRxiv : the preprint server for biology*
Lee, H., Luengo-Woods, S., Zhang, J., Makarova, K. S., Wolf, Y. I., Chiu, C., Evans, S. A., Chen, J., Xiao, H., Feng, L., Koonin, E. V., Gao, A.
2026
- **Proteolytic activation of diverse antiviral defense modules in prokaryotes.** *bioRxiv : the preprint server for biology*
Evans, S. A., Zhang, J., Lam, Y., Wang, K., Lin, Y. T., Herschlag, D., Feng, L., Gao, A.
2025
- **Structure and mechanism of the mitochondrial calcium transporter NCLX.** *Nature*
Fan, M., Tsai, C. W., Zhang, J., Zhang, J., Krishnan, A. R., Liu, T. Y., Huang, Y. L., Aydin, D., Du, S., Sobecks, B. L., Rodriguez, M. X., Reiter, A. H., Bertozzi, et al
2025
- **Molecular mechanisms of thiazide-like diuretics-mediated inhibition of the human Na-Cl cotransporter.** *Nature communications*
Lee, C. L., Zhang, J., Feng, L.
2025; 16 (1): 7740

- **Structure of mitochondrial pyruvate carrier and its inhibition mechanism** *NATURE*
He, Z., Zhang, J., Xu, Y., Fine, E. J., Suomivuori, C., Dror, R. O., Feng, L.
2025
- **A meiotic driver hijacks an epigenetic reader to disrupt mitosis in noncarrier offspring.** *Proceedings of the National Academy of Sciences of the United States of America*
Hua, Y., Zhang, J., Yang, M., Zhang, F., Ren, J., Lyu, X., Ding, Y., Suo, F., Shao, G., Li, J., Dong, M., Ye, K., Du, et al
2024; 121 (45): e2408347121
- **Structural duality enables a single protein to act as a toxin-antidote pair for meiotic drive.** *Proceedings of the National Academy of Sciences of the United States of America*
Hua, Y., Zhang, J., Yang, M., Ren, J., Suo, F., Liang, L., Dong, M., Ye, K., Du, L.
2024; 121 (45): e2408618121
- **Structure and mechanism of the alkane-oxidizing enzyme AlkB.** *Nature communications*
Guo, X., Zhang, J., Han, L., Lee, J., Williams, S. C., Forsberg, A., Xu, Y., Austin, R. N., Feng, L.
2023; 14 (1): 2180
- **Structure and thiazide inhibition mechanism of the human Na-Cl cotransporter.** *Nature*
Fan, M., Zhang, J., Lee, C. L., Zhang, J., Feng, L.
2023
- **Bridge-Like Lipid Transfer Proteins (BLTPs) in C. elegans: From Genetics to Structures and Functions.** *Contact (Thousand Oaks (Ventura County, Calif.))*
Pandey, T., Zhang, J., Wang, B., Ma, D. K.
2023; 6: 25152564231186489
- **A conserved megaprotein-based molecular bridge critical for lipid trafficking and cold resilience.** *Nature communications*
Wang, C., Wang, B., Pandey, T., Long, Y., Zhang, J., Oh, F., Sima, J., Guo, R., Liu, Y., Zhang, C., Mukherjee, S., Bassik, M., Lin, et al
2022; 13 (1): 6805
- **Structural mechanism of protein recognition by the FW domain of autophagy receptor Nbr1.** *Nature communications*
Zhang, J., Wang, Y. Y., Pan, Z. Q., Li, Y., Sui, J., Du, L. L., Ye, K.
2022; 13 (1): 3650
- **Molecular and structural mechanisms of ZZ domain-mediated cargo selection by Nbr1** *EMBO JOURNAL*
Wang, Y., Zhang, J., Liu, X., Li, Y., Sui, J., Dong, M., Ye, K., Du, L.
2021; 40 (15): e107497
- **Cryo-EM structure of fission yeast tetrameric alpha-mannosidase Ams1** *FEBS OPEN BIO*
Zhang, J., Wang, Y., Du, L., Ye, K.
2020; 10 (11): 2437-2451