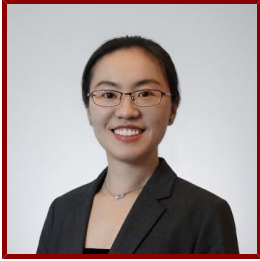


# Stanford

---



## Shu Zhang

Postdoctoral Scholar, Pathology

---

### Bio

#### BIO

My research interest is the correlation between tumor heterogeneity and ecDNA, especially related to drug resistance.

#### HONORS AND AWARDS

- Outstanding Graduate of Peking University, Peking University (2020)

#### STANFORD ADVISORS

- Paul Mischel, Postdoctoral Faculty Sponsor

---

### Research & Scholarship

#### LAB AFFILIATIONS

- Howard Chang, Chang lab (7/22/2022)
- Paul Mischel, Mischel lab (7/22/2022)

---

### Publications

#### PUBLICATIONS

- **EcDNA-borne structural variants drive oncogenic fusion transcript amplification.** *Cell*  
Yi, H., Zhang, S., Swiderman, J., Wang, Y., Kanakaveti, V., Hung, K. L., Tsz-Lo Wong, I., Srinivasan, S., Curtis, E. J., Bhargava-Shah, A., Li, R., Jones, M. G., Luebeck, et al  
2026
- **Single-cell transcriptomics identifies divergent developmental lineage trajectories during human pituitary development** *NATURE COMMUNICATIONS*  
Zhang, S., Cui, Y., Ma, X., Yong, J., Yan, L., Yang, M., Ren, J., Tang, F., Wen, L., Qiao, J.  
2020; 11 (1): 5275
- **A single-cell transcriptomic landscape of primate arterial aging** *NATURE COMMUNICATIONS*  
Zhang, W., Zhang, S., Yan, P., Ren, J., Song, M., Li, J., Lei, J., Pan, H., Wang, S., Ma, X., Ma, S., Li, H., Sun, et al  
2020; 11 (1): 2202
- **A single-cell RNA-seq survey of the developmental landscape of the human prefrontal cortex** *NATURE*  
Zhong, S., Zhang, S., Fan, X., Wu, Q., Yan, L., Dong, J., Zhang, H., Li, L., Sun, L., Pan, N., Xu, X., Tang, F., Zhang, et al  
2018; 555 (7697): 524+
- **Accurate prediction of ecDNA in interphase cancer cells using deep neural networks.** *Communications biology*  
Prasad, G., Rajkumar, U., Curtis, E. J., Wong, I. T., Yan, X., Zhang, S., Brückner, L., Turner, K., Wiese, J., Wahl, J., Hemmati, H., Wu, S., Theissen, et al

2026

- **Unveiling ecDNA spatial organization and epigenetic landscapes through long-read multi-omic sequencing and high-content microscopy.**

Wang, Y., Yan, X., Weiser, N. E., Zhang, S., Tsz-Lo Wong, I., Huang, Y., Li, R., Altemose, N., Mischel, P. S., Chang, H. Y.

AMER ASSOC CANCER RESEARCH.2026

- **Dynamic and defective repair of extrachromosomal DNA drives genome instability in cancer**

Zhang, S., Wang, Y., Watkins, T. B., Yan, X., Gnanasekar, A., Tang, J., Wong, I. T., Chang, H. Y., Mischel, P. S.

AMER ASSOC CANCER RESEARCH.2026

- **Reconstructing the three-dimensional architecture of extrachromosomal DNA with ec3D.** *Nature communications*

Chowdhury, B., Zhu, K., Li, C., Alsing, J., Luebeck, J., Stefanova, M. E., Chapman, O. S., Kraft, K., Zhang, S., Lim, J. Y., Xie, Y., Kim, Y. J., Wu, et al  
2025

- **Oncogene Silencing via ecDNA Micronucleation.** *bioRxiv : the preprint server for biology*

Brückner, L., Xu, R., Tang, J., Herrmann, A., Wong, I. T., Zhang, S., Tu, F., Pilon, M., Kukalev, A., Pardon, K., Sidorova, O., Atta, J., Yu, et al  
2025

- **Engineered extrachromosomal oncogene amplifications promote tumorigenesis.** *Nature*

Pradella, D., Zhang, M., Gao, R., Yao, M. A., Gluchowska, K. M., Cendon-Florez, Y., Mishra, T., La Rocca, G., Weigl, M., Jiao, Z., Nguyen, H. H., Lisi, M., Ozimek, et al

2024

- **Enhancing transcription-replication conflict targets ecDNA-positive cancers.** *Nature*

Tang, J., Weiser, N. E., Wang, G., Chowdhry, S., Curtis, E. J., Zhao, Y., Wong, I. T., Marinov, G. K., Li, R., Hanoian, P., Tse, E., Mojica, S. G., Hansen, et al

2024; 635 (8037): 210-218

- **Cohesin prevents cross-domain gene coactivation.** *Nature genetics*

Dong, P., Zhang, S., Gandin, V., Xie, L., Wang, L., Lemire, A. L., Li, W., Otsuna, H., Kawase, T., Lander, A. D., Chang, H. Y., Liu, Z. J.

2024

- **CoRAL accurately resolves extrachromosomal DNA genome structures with long-read sequencing.** *Genome research*

Zhu, K., Jones, M. G., Luebeck, J., Bu, X., Yi, H., Huang, K. L., Wong, I. T., Zhang, S., Mischel, P. S., Chang, H., Bafna, V.

2024

- **Single-cell transcriptomic profiling reveals the tumor heterogeneity of small-cell lung cancer.** *Signal transduction and targeted therapy*

Tian, Y., Li, Q., Yang, Z., Zhang, S., Xu, J., Wang, Z., Bai, H., Duan, J., Zheng, B., Li, W., Cui, Y., Wang, X., Wan, et al

2022; 7 (1): 346

- **Single-cell transcriptome and genome analyses of pituitary neuroendocrine tumors** *NEURO-ONCOLOGY*

Cui, Y., Li, C., Jiang, Z., Zhang, S., Li, Q., Liu, X., Zhou, Y., Li, R., Wei, L., Li, L., Zhang, Q., Wen, L., Tang, et al

2021; 23 (11): 1859-1871

- **Decoding the development of the human hippocampus** *NATURE*

Zhong, S., Ding, W., Sun, L., Lu, Y., Dong, H., Fan, X., Liu, Z., Chen, R., Zhang, S., Ma, Q., Tang, F., Wu, Q., Wang, et al

2020; 577 (7791): 531+