

## Xinyu Xiang

Ph.D. Student in Biophysics, admitted Autumn 2021

### Publications

---

#### PUBLICATIONS

- **Overcoming T cell tolerance to tumor self-antigens through catch-bond engineering.** *Science (New York, N.Y.)*  
Chen, X., Mao, Z., Kolawole, E. M., Persechino, M., Jude, K. M., Ogishi, M., Mo, K. C., McLaughlin, J., Cheng, D., Xiang, X., Yang, X., Gee, C., Liu, et al  
2026; 391 (6791): eadx3162
- **Design of high-specificity binders for peptide-MHC-I complexes.** *Science (New York, N.Y.)*  
Liu, B., Greenwood, N. F., Bonzanini, J. E., Motmaen, A., Meyerberg, J., Dao, T., Xiang, X., Ault, R., Sharp, J., Wang, C., Visani, G. M., Vafeados, D. K., Roullier, et al  
2025; 389 (6758): 386-391
- **De novo design and structure of a peptide-centric TCR mimic binding module.** *Science (New York, N.Y.)*  
Householder, K. D., Xiang, X., Jude, K. M., Deng, A., Obenaus, M., Zhao, Y., Wilson, S. C., Chen, X., Wang, N., Garcia, K. C.  
2025; 389 (6758): 375-379
- **De novo design and structure of a peptide-centric TCR mimic binding module.** *bioRxiv : the preprint server for biology*  
Householder, K. D., Xiang, X., Jude, K. M., Deng, A., Obenaus, M., Wilson, S. C., Chen, X., Wang, N., Garcia, K. C.  
2024
- **Structure of the interleukin-5 receptor complex exemplifies the organizing principle of common beta cytokine signaling.** *Molecular cell*  
Caveney, N. A., Rodriguez, G. E., Pollmann, C., Meyer, T., Borowska, M. T., Wilson, S. C., Wang, N., Xiang, X., Householder, K. D., Tao, P., Su, L. L., Saxton, R. A., Piehler, et al  
2024
- **Organizing Structural Principles of the Interleukin-17 Ligand-Receptor Axis.** *Nature*  
Wilson, S. C., Caveney, N. A., Yen, M., Pollmann, C., Xiang, X., Jude, K. M., Hafer, M., Tsutsumi, N., Piehler, J., Garcia, K. C.  
2022
- **Homotypic fibrillization of TMEM106B across diverse neurodegenerative diseases.** *Cell*  
Chang, A., Xiang, X., Wang, J., Lee, C., Arakhamia, T., Simjanoska, M., Wang, C., Carlomagno, Y., Zhang, G., Dhingra, S., Thierry, M., Perneel, J., Heeman, et al  
2022
- **Crystal structure and functional analysis of mycobacterial erythromycin resistance methyltransferase Erm38 reveals its RNA-binding site** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Goh, B., Xiang, X., Lescar, J., Dedon, P. C.  
2022; 298 (2): 101571
- **Long-range structural defects by pathogenic mutations in most severe glucose-6-phosphate dehydrogenase deficiency.** *Proceedings of the National Academy of Sciences of the United States of America*  
Horikoshi, N. n., Hwang, S. n., Gati, C. n., Matsui, T. n., Castillo-Orellana, C. n., Raub, A. G., Garcia, A. A., Jabbarpour, F. n., Batyuk, A. n., Broweleit, J. n., Xiang, X. n., Chiang, A. n., Broweleit, et al  
2021; 118 (4)