

Stanford

Xuchao Lyu

Postdoctoral Scholar, Pathology

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BIO

Dr. Xuchao Lyu (Lyu) received his bachelor's degree in biology and chemistry from Jilin University, China in 2011. He completed his Ph.D. in metabolism disease at Tsinghua University in 2019. He worked with Peng Li to study the mechanism of lipid droplet growth. He uncovered the unique lipid-permeable condensate that allows lipid transfer which is formed through 2D phase separation on the phospholipid membrane. Xuchao is currently a postdoc in Jonathan Long's lab at Stanford University. He is studying the secreted factors from various tissues during exercise. Outside of the lab, he enjoys eating and cooking.

PROFESSIONAL EDUCATION

- Bachelor of Science, Jilin University (2011)
- Doctor of Philosophy, Tsinghua University (2019)
- PhD, Tsinghua University, Obesity and metabolism (2019)
- BA, Jilin University, Biology and chemistry (2011)

STANFORD ADVISORS

- Jonathan Long, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **ENPP1 is an innate immune checkpoint of the anticancer cGAMP-STING pathway.** *bioRxiv : the preprint server for biology*
Wang, S., Böhnert, V., Joseph, A. J., Sudaryo, V., Swinderman, J., Yu, F. B., Lyu, X., Skariah, G., Subramanyam, V., Gilbert, L. A., Goodarzi, H., Lingyin, L. 2023
- **CYP4F2 is a human-specific determinant of circulating N-acyl amino acid levels.** *The Journal of biological chemistry*
Tanzo, J. T., Li, V. L., Wiggenhorn, A. L., Moya-Garzon, M. D., Wei, W., Lyu, X., Dong, W., Tahir, U. A., Chen, Z. Z., Cruz, D. E., Deng, S., Shi, X., Zheng, et al 2023: 104764
- **Organism-wide, cell-type-specific secretome mapping of exercise training in mice.** *Cell metabolism*
Wei, W., Riley, N. M., Lyu, X., Shen, X., Guo, J., Raun, S. H., Zhao, M., Moya-Garzon, M. D., Basu, H., Sheng-Hwa Tung, A., Li, V. L., Huang, W., Wiggenhorn, et al 2023
- **A class of secreted mammalian peptides with potential to expand cell-cell communication** *BioRxiv*
Wiggenhorn, A. L.
2023
- **An exercise-inducible metabolite that suppresses feeding and obesity.** *Nature*
Li, V. L., He, Y., Contrepois, K., Liu, H., Kim, J. T., Wiggenhorn, A. L., Tanzo, J. T., Tung, A. S., Lyu, X., Zushin, P. H., Jansen, R. S., Michael, B., Loh, et al 2022
- **Protocol for cell type-specific labeling, enrichment, and proteomic profiling of plasma proteins in mice.** *STAR protocols*
Wei, W., Riley, N. M., Lyu, X., Bertozzi, C. R., Long, J. Z.

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• **A gel-like condensation of Cidec generates lipid-permeable plates for lipid droplet fusion.** *Developmental cell*

Lyu, X., Wang, J., Wang, J., Yin, Y. S., Zhu, Y., Li, L. L., Huang, S., Peng, S., Xue, B., Liao, R., Wang, S. Q., Long, M., Wohland, et al
2021

• **Identification of gene products that control lipid droplet size in yeast using a high-throughput quantitative image analysis** *BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR AND CELL BIOLOGY OF LIPIDS*

Lv, X., Liu, J., Qin, Y., Liu, Y., Jin, M., Dai, J., Chua, B., Yang, H., Li, P.
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