Stanford



# Xia Li (Lisa)

Basic Life Res Scientist, Biology

## Bio

### ACADEMIC APPOINTMENTS

- Basic Life Res Scientist, Biology

### PROFESSIONAL EDUCATION

- PhD, Institute of Biophysics, Chinese Academy of Sciences , Cell Biology

## Research & Scholarship

### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My current research focuses on how aging-associated loss of proteome homeostasis (proteostasis) and organelle dysfunction, particularly lysosomal impairment, drive selective neuronal vulnerability in Parkinson's disease. I integrate mechanistic biochemistry with neuronal cell biology to define how protein aggregates disrupt lysosomal function and how proteostasis and lysosome contributes to neuronal dysfunction and disease pathology.

## Publications

### PUBLICATIONS

- **Channel width modulates the permeability of DNA origami based nuclear pore mimics.** *bioRxiv : the preprint server for biology*
  Feng, Q., Saladin, M., Wu, C., Cao, E., Zheng, W., Zhang, A., Bhardwaj, P., Li, X., Shen, Q., Kapinos, L. E., Mariappan, M., Lusk, C. P., Xiong, et al
  2024

- **Nascent Chain Ubiquitination is Uncoupled from Degradation to Enable Protein Maturation.** *bioRxiv : the preprint server for biology*
  Li, X., Mariappan, M.
  2023

- **Rapid Quantification of First and Second Phase Insulin Secretion Dynamics using an In vitro Platform for Improving Insulin Therapy.** *Cell calcium*
  Thoduvayil, S., Weerakkody, J. S., Sundaram, R. V., Topper, M., Bera, M., Coleman, J., Li, X., Mariappan, M., Ramakrishnan, S.
  2023; 113: 102766

- **Signal sequences encode information for protein folding in the endoplasmic reticulum.** *The Journal of cell biology*
  Sun, S., Li, X., Mariappan, M.
  2023; 222 (1)

- **A second chance for protein targeting/folding: Ubiquitination and deubiquitination of nascent proteins.** *BioEssays : news and reviews in molecular, cellular and developmental biology*
  Culver, J. A., Li, X., Jordan, M., Mariappan, M.
  2022; 44 (6): e2200014

- **A Molecular Mechanism for Turning Off IRE1α Signaling during Endoplasmic Reticulum Stress.** *Cell reports*
  Li, X., Sun, S., Appathurai, S., Sundaram, A., Plumb, R., Mariappan, M.
  2020; 33 (13): 108563
- **Transmembrane E3 ligase RNF183 mediates ER stress-induced apoptosis by degrading Bcl-xL.** *Proceedings of the National Academy of Sciences of the United States of America*
  Wu, Y., Li, X., Jia, J., Zhang, Y., Li, J., Zhu, Z., Wang, H., Tang, J., Hu, J.
  2018; 115 (12): E2762-E2771