

# XINXIN LI

Email: lxx22081501@mail.ustc.edu.cn | +86 19556029852

## EDUCATION

### University of Science and Technology of China

Bachelor of Science in Biosciences

Anhui, China

Sep.2022 – Jun.2026(Expected)

- Overall GPA: 3.30/4.3

2022-2023: 3.08/4.3    2023-2024: 3.28/4.3    2024-2025: 3.77/4.3

### Selected Courses

Molecular Biology II (A-,89/100)    Immunobiology(A,91/100)    Introduction to Synthetic Biology(A,90/100)

## HONORS

- **National Encouragement Scholarship** 2024
- Endeavour Scholarship 2023

## RESEARCH INTERESTS

Cancer, Clinical treatment, Organoids, Bioinformatics;

## PUBLICATIONS

[1] **Glioblastoma quiescent cells hijack astrocyte-derived mitochondria to drive activation and malignancy**  
Hongrui Zhu; Li Wang; Qi Wu; Mengmeng Yang; **Xinxin Li**; Youqiong Ye; Wenchao Zhou; Xuedan Sun; Sheng Wang;  
Qingsong Hu, **Cell Metabolism(submitted)**, June.2025

[2] **Astrocytic glycogen induces ATAD3A oligomerization-dependent mitochondrial fragmentation to exacerbate neuropathology and delay recovery after ischemic stroke**  
Hongrui Zhu; Mengmeng Yang; Zhong Li; Li Wang; Jiaming Zhang; **Xinxin Li**; Qingsong Hu; Sheng Wang,  
**Nature Communications(under review)**, June.2025

## RESEARCH EXPERIENCE

**The role of Fcrl2<sup>+</sup> Macrophages in diabetic peripheral neuropathy** USTC  
Advisors: **Prof. Sheng Wang** (Department of Anesthesiology and Pain Medicine, First Affiliated Hospital of USTC)  
March. 2025 – So far

### Major Researcher

- Discovered and validated the increase of Fcrl2<sup>+</sup> Macrophages in DRG in diabetic mouse through bioinformatic and histological analysis.
- Confirmed that Fcrl2<sup>+</sup> Macrophages in DRG could ease the diabetic peripheral neuropathy by testing CRISPR-edited mouse's behavior and tissues.

**National training Program for Innovation** USTC  
Advisors: **Prof. Qingsong Hu** (Department of Life Science and Medicine, USTC) May. 2024 - May. 2025

### Team Leader & Major Researcher

**Research on the role of astrocytic mitochondrial transfer in the progression of prostate cancer metastasis to the brain**

- Identified that the brain metastasis cancer cells could receive mitochondrial from astrocytic.
- Found the mitochondrial transfer would enhance the reproduction ability of tumor cells and worsen the cancer.

*Best program of the year.*

**Undergraduate Research Program** USTC  
Advisors: **Prof. Qingsong Hu** (Department of Life Science and Medicine, USTC) Nov. 2023 - Dec. 2024

### Major Researcher

**Construction and identification of a prostate cancer brain metastasis cell line**

- Designed and built a cell line which could transfer to brain specifically by in vivo selection via intracardiac injection

## TECHNICAL SKILLS

**Molecular & Cellular:** SDS-PAGE; Western Blot; Co-IP; DNA Gel electrophoresis; Immunofluorescence; PCR; Cloning; Cell culture; Transfection; RNAi; Flow cytometry;

**Animal experiments:** Mouse Model (Diabetic mouse model; Tumor model; CCI; SNI;); Stereotactic brain localization and injection; Heart perfusion; Primary cell extraction(Astrocyte; BMDM);

**Bioinformatics:** RNA-seq; Python-Scanpy(for scRNA-seq); R-ggplot2(and other packages for graph);

**Software:** LAS X; Snap Gene; ImageJ; FlowJo; GraphPad Prism; Origin; Adobe Illustrator; IGV;

**Language:** Proficient English