# Qingqing Li

January 8th, 1996 | E-mail: <u>qingqingli3631@outlook.com</u> | Tel: +86 177 2192 5845

Address: Shanghai, China, 221000 | Portfolio: My website

#### **EDUCATION**

Master of Medicine Xuzhou Medical University, China Sep 2020 - Jun 2023

GPA: 86.30/100

Thesis: Microglial Lysosomal Mechanisms for Major Depressive Disorder Alleviation

Bachelor of Medicine North Sichuan Medical College, China Sep 2015 - Jun 2020

• GPA: 80.06/100 (range: 38/197)

## **RESEARCH EXPERIENCE**

#### **Research Assistant**

Shanghai Pudong New Area Mental Health Center, Tongji University School of Medicine, Shanghai, China

Jun 2025 - Aug 2025

Supervisor: Dr. Weijie Xie

- Conducted integrative genetic analyses by combining GWAS data with Mendelian Randomization, Transcriptome-Wide Association Study (TWAS), Proteome-Wide Association Study (PWAS), and Bayesian colocalization.
- Constructed a cross-disorder, cross-brain regional genetic causal map, elucidating the genetic underpinnings of comorbidity mechanisms in psychiatric disorders.

#### **Research Assistant**

Shanghai Pudong New Area Mental Health Center, Tongji University School of Medicine, Shanghai, China

Aug 2024 - May 2025

Supervisor: Dr. Weijie Xie

- Utilized single-cell RNA sequencing data analysis (e.g., CellChat, SCENIC, Monocle) integrated with Mendelian Randomization and Machine Learning models (e.g., random forest, SVM).
- Identified impaired microglia subtypes characterized by metabolic dysfunction and chronic neuroinflammation, which drive aberrant microglia-GABAergic neuron crosstalk in Major Depressive Disorder.

#### **Research Assistant**

Shanghai Mental Health Center, Shanghai, China

Jul 2023 - Present

Supervisor: Dr. Jiaoqiong Guan

- Performing integrative bioinformatics analyses (e.g., WGCNA, Machine Learning, singlecell analysis) and validation experiments using the Chronic Unpredictable Mild Stress model, with molecular techniques (Immunohistochemistry Staining and Western Blot).
- Aiming to identify an immune target that may underlie the shared immune pathogenesis which drives the comorbidity progression of Systemic Lupus Erythematosus and Major Depressive Disorder.

Master's Student Researcher (Focused on Microglial Mechanisms in Depression)

Xuzhou Medical University, Xuzhou, China

Sep 2020 - Jun 2023

Supervisor: Prof. Dr. Wuyang Wang

Applied in vivo (LPS / Chronic Restraint Stress mouse model, stereotaxic surgery) and in

- vitro (primary microglia isolation and culture) techniques.
- Characterized a novel microglial lysosomal molecular mechanism implicated in the pathophysiology of depressive-like models and proposed a potential targeted intervention.

#### **PUBLICATIONS**

- Qingqing Li, et al. Mendelian Randomization Analysis of Multiregional Psychiatric Disorders. (Submitted)
- Qingqing Li, et al. Single-Cell Dissection of Microglial Heterogeneity Reveals Subtype-Driven Immune-Metabolic Crosstalk in Major Depressive Disorder. (Submitted)
- Qingqing Li, et al. Microglia sing the prelude of neuroinflammation-associated depression. Molecular Neurobiology. 2025 Apr;62(4):5311-5332. (JCR Q1)
- Yanhong Xing, Meng-Meng Wang, Feifei Zhang, Tianli Xin, Xinyan Wang, Rong Chen, Zhongheng Sui, Yawei Dong, Dongxue Xu, Xingyu Qian, Qixia Lu, Qingqing Li, et al. Lysosomes finely control macrophage inflammatory function via regulating the release of lysosomal Fe<sup>2+</sup> through TRPML1 channel. *Nature Communications*. 2025 Jan 24;16(1):985. (JCR Q1)
- Jiansong Qi, Qingqing Li, et al. MCOLN1/TRPML1 in the lysosome: a promising target for autophagy modulation in diverse diseases. Autophagy. 2024 Aug;20(8):1712-1722.
   (JCR Q1)

#### **SKILLS**

- Wet-Lab Techniques: qPCR, Western Blot, Immunofluorescence/Immunohistochemistry,
   ELISA, Golgi Staining, Electrophoresis, Cell Culture, Animal Models.
- Bioinformatics Tools: R (Bioconductor, Tidyverse), Python (Pandas, Numpy).
- Genetic Association: Mendelian Randomization (TwoSampleMR), TWAS/PWAS (FUSION), Colocalization (coloc)
- Single-Cell Omics: scRNA-seq analysis (Seurat), Trajectory Inference (Monocle), Cell-Cell Communication (CellChat), Regulatory Network (PySCENIC).
- **Software:** EndNote, GraphPad Prism, ImageJ, Imaris, Adobe Illustrator & Photoshop.
- Languages: Mandarin Chinese (Native), English (IELTS 6.5).

### **ACADEMIC SERVICE**

Peer Reviewer for Molecular Neurobiology and Cellular and Molecular Neurobiology.
 2024-Present

#### **HONORS**

Postgraduate Scholarship, Xuzhou Medical University.

2020-2023

### **REFERENCES**

- Prof. Dr. Wuyang Wang (Master's Thesis Supervisor) | wuyangwang80@gmail.com
- Prof. Dr. Jiaogiong Guan (Research Supervisor) | guanjiaogiong@kmmu.edu.cn
- Prof. Dr. Weijie Xie (Research Supervisor) | xwjginseng@126.com