

Xiaojuan Gou

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EDUCATION

- **Huazhong Agricultural University** Wuhan, China
Sep. 2020 - Present
Neuroscience and Immunology *supervisor: Prof. Gang Cao & Prof. Xiangru Wang*
- **Sichuan Agricultural University** Sichuan, China
Sep. 2016 - Jun. 2020
Preventive Veterinary Medicine
GPA: 4.06/5 (Rank: 1/220)

RESEARCH EXPERIENCE

- **Strategies to package recombinant Adeno-Associated Virus expressing the N-terminal gasdermin domain for tumor treatment (Published, Nature Communications)**
Using single-cell transcriptome data analysis to explain rAAV-P2 treatment activates antitumor immunity and inhibits the growth of triple-negative breast cancer (TNBC). (Oct. 2020 - Dec. 2021)
- **Single-cell transcriptome landscape and antigen receptor dynamic during SARS-CoV-2 vaccination (Published, Genes & Diseases)** (Feb. 2022 - Jul. 2023)
Mapping single-cell profiles of immune responses following vaccination with an inactivated COVID-19 vaccine.
- **Mechanisms of transport stress exacerbating Mycobacterium tuberculosis infection in mouse**
Use single cell and bulk transcriptome data to study the regulatory mechanisms between nerves and immunity. (Apr. 2021 - Present)
- **Pipeline construction of downstream analysis process of spatial transcriptomics** (Mar. 2022 - Present)
- **Single-cell spatial transcriptomic analysis of macaque, marmoset and mouse hippocampus**
Integrated analysis of single-cell transcriptome and spatial transcriptome data to draw a spatial transcriptome map of the hippocampus of three species. (Jun. 2022 - Present)

RESEARCH INTERESTS

- Data analysis related software development.
- Application of single cell and spatial omics technology in "neuro-immune-infection" systems biology.

SKILLS

- **Languages:** English(CET-6: 500).
- **Techniques:** Analysis of a series of omics data such as RNA-sequencing, Single-cell and spatial transcriptomic, Hi-C, ChIP-seq, ATAC-seq, etc., Use of common packages in python and R, Linux, Database use.