

Stanford



Wei Su

Postdoctoral Scholar, Molecular and Cellular Physiology

Curriculum Vitae available Online

Bio

BIO

I was born and raised in the small town of China. Nourished and nurtured in the curious environment, I have been fascinated by nature and scientific questions, devoted my time to research. My primary interest is to explore the immune regulation and glial-neuronal interactions in brain homeostasis and their implications in neuronal disorders or neurodegenerative diseases.

HONORS AND AWARDS

- Outstanding student award in neuroscience, The University of Tennessee (2021)
- Third prize in 2021 Virtual Graduate Research Day, The University of Tennessee (2021)
- Award for Outstanding Self-Financed Student Abroad, China (2020)
- Second prize in 4th Memphis Scipreneur Challenge, The University of Tennessee (2020)
- Excellent Graduate Students of Wuhan University, Wuhan University (2013)
- Furong student • Academic Research Award, Hunan development foundation (2012)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Tennessee Memphis (2021)
- Bachelor of Science, Wuhan University (2013)
- B.S, Wuhan University , Biology (2013)
- PhD, The University of Tennessee-St Jude Children's Research Hospital , Neuroscience (2021)

STANFORD ADVISORS

- Thomas Sudhof, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Glial-neuronal axis in regulation of synapse and circuit in brain development and diseases

Immune signaling and cellular metabolism in dictating T cell development and function in autoimmunity and cancer

Single cell RNA/TCR sequencing to identify cellular interaction network in regulation of neurodegeneration

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Immunology/Rheumatology (Fellowship Program)
- Neuropathology (Fellowship Program)
- Neurosciences (Phd Program)
- Neurootology (Fellowship Program)

Publications

PUBLICATIONS

- **CXCR6 orchestrates brain CD8+ T cell residency and limits mouse Alzheimer's disease pathology.** *Nature immunology*
Su, W., Saravia, J., Risch, I., Rankin, S., Guy, C., Chapman, N. M., Shi, H., Sun, Y., Kc, A., Li, W., Huang, H., Lim, S. A., Hu, et al
2023
- **PTEN directs developmental and metabolic signaling for innate-like T cell fate and tissue homeostasis.** *Nature cell biology*
Blanco, D. B., Chapman, N. M., Raynor, J. L., Xu, C., Su, W., Kc, A., Li, W., Lim, S. A., Schattgen, S., Shi, H., Risch, I., Sun, Y., Dhungana, et al
2022; 24 (11): 1642-1654
- **Lipid metabolism in T cell signaling and function.** *Nature chemical biology*
Lim, S. A., Su, W., Chapman, N. M., Chi, H.
2022; 18 (5): 470-481
- **CRISPR screens unveil signal hubs for nutrient licensing of T cell immunity.** *Nature*
Long, L., Wei, J., Lim, S. A., Raynor, J. L., Shi, H., Connelly, J. P., Wang, H., Guy, C., Xie, B., Chapman, N. M., Fu, G., Wang, Y., Huang, et al
2021; 600 (7888): 308-313
- **Lipid signalling enforces functional specialization of Treg cells in tumours.** *Nature*
Lim, S. A., Wei, J., Nguyen, T. M., Shi, H., Su, W., Palacios, G., Dhungana, Y., Chapman, N. M., Long, L., Saravia, J., Vogel, P., Chi, H.
2021; 591 (7849): 306-311
- **Protein Prenylation Drives Discrete Signaling Programs for the Differentiation and Maintenance of Effector Treg Cells.** *Cell metabolism*
Su, W., Chapman, N. M., Wei, J., Zeng, H., Dhungana, Y., Shi, H., Saravia, J., Zhou, P., Long, L., Rankin, S., Kc, A., Vogel, P., Chi, et al
2020; 32 (6): 996-1011.e7
- **Phase-separated condensate-aided enrichment of biomolecular interactions for high-throughput drug screening in test tubes.** *The Journal of biological chemistry*
Zhou, M., Li, W., Li, J., Xie, L., Wu, R., Wang, L., Fu, S., Su, W., Hu, J., Wang, J., Li, P.
2020; 295 (33): 11420-11434
- **Discrete roles and bifurcation of PTEN signaling and mTORC1-mediated anabolic metabolism underlie IL-7-driven B lymphopoiesis.** *Science advances*
Zeng, H., Yu, M., Tan, H., Li, Y., Su, W., Shi, H., Dhungana, Y., Guy, C., Neale, G., Cloer, C., Peng, J., Wang, D., Chi, et al
2018; 4 (1): eaar5701
- **Iodobacter limnosediminis sp. nov., isolated from Arctic lake sediment.** *International journal of systematic and evolutionary microbiology*
Su, W., Zhou, Z., Jiang, F., Chang, X., Liu, Y., Wang, S., Kan, W., Xiao, M., Shao, M., Peng, F., Fang, C.
2013; 63 (Pt 4): 1464-1470