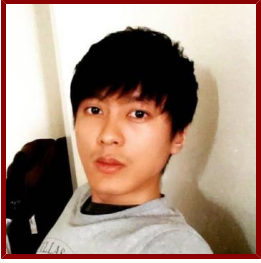


# Stanford

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## TZU HAN LO

Postdoctoral Scholar, Gastroenterology

### Bio

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#### BIO

Tzu-Han Lo, a researcher at the Institute of Biomedical Sciences at Academia Sinica, has made contributions to the field of macrophage biology. His work has particularly focused on inflammation, especially in the context of fibrotic response. One of his works includes a study on the regulation of macrophage polarization in ureteral obstruction. This research has illuminated the role of inflammatory cell infiltration and activation during the early stages of kidney injury, a common pathological feature of chronic kidney disease.

In addition to his work on macrophage biology, Tzu-Han Lo has also delved into research related to galectins, a family of  $\beta$ -galactoside-binding proteins. His work in this area has centered on the role of galectins in recognizing microbial glycans, particularly lipopolysaccharides (LPSs). He has explored their impact on host defense mechanisms, including autophagy and both canonical and non-canonical inflammasome signaling pathways.

His research has offered insights into the complex interactions between host immunity and microbial components. This has contributed to our understanding of inflammatory responses and their implications for human health.

#### STANFORD ADVISORS

- Natalie Torok, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **The role of galectins in the regulation of autophagy and inflammasome in host immunity.** *Seminars in immunopathology*  
Lo, T. H., Weng, I. C., Chen, H. L., Liu, F. T.  
2024; 46 (3-4): 6
- **Cytosolic galectin-4 enchains bacteria, restricts their motility, and promotes inflammasome activation in intestinal epithelial cells.** *Proceedings of the National Academy of Sciences of the United States of America*  
Li, C. S., Lo, T. H., Tu, T. J., Chueh, D. Y., Yao, C. I., Lin, C. H., Chen, P., Liu, F. T.  
2023; 120 (5): e2207091120
- **Galectin-3 promotes noncanonical inflammasome activation through intracellular binding to lipopolysaccharide glycans.** *Proceedings of the National Academy of Sciences of the United States of America*  
Lo, T. H., Chen, H. L., Yao, C. I., Weng, I. C., Li, C. S., Huang, C. C., Chen, N. J., Lin, C. H., Liu, F. T.  
2021; 118 (30)
- **Galectin-8 Is Upregulated in Keratinocytes by IL-17A and Promotes Proliferation by Regulating Mitosis in Psoriasis.** *The Journal of investigative dermatology*  
Lo, Y. H., Li, C. S., Chen, H. L., Chiang, C. Y., Huang, C. C., Tu, T. J., Lo, T. H., Choy, D. F., Arron, J. R., Chen, H. Y., Liu, F. T.

2021; 141 (3): 503-511.e9

- **Cytosolic galectin-3 and -8 regulate antibacterial autophagy through differential recognition of host glycans on damaged phagosomes.** *Glycobiology*  
Weng, I. C., Chen, H. L., Lo, T. H., Lin, W. H., Chen, H. Y., Hsu, D. K., Liu, F. T.  
2018; 28 (6): 392-405
- **Galectin-3 Enhances Avian H5N1 Influenza A Virus-Induced Pulmonary Inflammation by Promoting NLRP3 Inflammasome Activation.** *The American journal of pathology*  
Chen, Y. J., Wang, S. F., Weng, I. C., Hong, M. H., Lo, T. H., Jan, J. T., Hsu, L. C., Chen, H. Y., Liu, F. T.  
2018; 188 (4): 1031-1042
- **TREM-1 regulates macrophage polarization in ureteral obstruction.** *Kidney international*  
Lo, T. H., Tseng, K. Y., Tsao, W. S., Yang, C. Y., Hsieh, S. L., Chiu, A. W., Takai, T., Mak, T. W., Tarng, D. C., Chen, N. J.  
2014; 86 (6): 1174-86