



## Xin Zhou

Postdoctoral Scholar, Genetics

 NIH Biosketch available Online

### Bio

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#### INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

#### HONORS AND AWARDS

- Longitudinal Analyses of Long COVID, ME/CFS and PTLDS Using Wearable Devices and Microsampling, Stanford Institute for Immunity, Transplantation and Infection (01/01/2023)
- Characterization of dietary-related dysbiosis and autoimmune signatures among T1D patients, Stanford – Rambam Health Care Campus Collaboration Award (09/30/2022)
- Discovering novel Clostridia strains that modulate immune response in organoids, Bill and Melinda Gates Foundation/Innovative Medicines Accelerator (06/30/2022)
- Trainee Poster Award, The American Association of Immunologists (05/08/2022)
- Resource Centers for Minority Aging Research (RCMAR) Fellowship Award, National Institute on Aging/Stanford AGE Research Center (01/06/2021)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Society for Microbiology (2024 - present)
- Associate Editor, Frontiers In Bacteriology (2023 - present)
- Guest Associate Editor, Frontiers in Cellular and Infection Microbiology (2022 - present)
- Member, The American Association of Immunologists (2021 - present)

#### PROFESSIONAL EDUCATION

- Bachelor of Science, Fudan University (2011)
- Ph.D., University of Connecticut Health Center & The Jackson Laboratory for Genomic Medicine , Genetics and Genome Science (2019)
- Ignite, Stanford University Graduate School of Business , Entrepreneurship/Entrepreneurial Studies (2024)

#### STANFORD ADVISORS

- Michael Snyder, Postdoctoral Faculty Sponsor

#### LINKS

- Google Scholar: <https://scholar.google.com/citations?user=41V2eJ8AAAAJ&hl=zh-CN>
- LinkedIn: <https://www.linkedin.com/in/xinzhou-uchc/>

## Research & Scholarship

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### LAB AFFILIATIONS

- Michael Snyder, Snyder Lab (6/15/2019)

### Publications

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#### PUBLICATIONS

- **Longitudinal profiling of the microbiome at four body sites reveals core stability and individualized dynamics during health and disease.** *Cell host & microbe*  
Zhou, X., Shen, X., Johnson, J. S., Spakowicz, D. J., Agnello, M., Zhou, W., Avina, M., Honkala, A., Chleilat, F., Chen, S. J., Cha, K., Leopold, S., Zhu, et al  
2024
- **Dynamic lipidome alterations associated with human health, disease and ageing.** *Nature metabolism*  
Hornburg, D., Wu, S., Moqri, M., Zhou, X., Contrepois, K., Bararpour, N., Traber, G. M., Su, B., Metwally, A. A., Avina, M., Zhou, W., Ubellacker, J. M., Mishra, et al  
2023
- **Single-cell sequencing of PBMC characterizes a distinct inflammatory monocyte subset in Lyme disease patients with Post-Treatment Lyme Disease Syndrome (PTLD)**  
Chen, X., Zhou, X., Ji, X., Miranda, M., Rebman, A., Kathuria, K., Robinson, W. H., Aucott, J., Davis, M. M.  
AMER ASSOC IMMUNOLOGISTS.2023
- **Association between the dynamics of the gut microbiota and responsiveness to mental health therapy**  
Zhou, X., Ganz, A. B., Lu, X., Li, Y., Snyder, M.  
AMER ASSOC IMMUNOLOGISTS.2023
- **Simultaneous profiling of host expression and microbial abundance by spatial metatranscriptome sequencing** *GENOME RESEARCH*  
Lyu, L., Li, X., Feng, R., Zhou, X., Guha, T. K., Yu, X., Chen, G., Yao, Y., Su, B., Zou, D., Snyder, M. P., Chen, L.  
2023; 33 (3): 401-411
- **Gut microbiota analyses of Saudi populations for type 2 diabetes-related phenotypes reveals significant association.** *BMC microbiology*  
Al-Muhanna, F. A., Dowdell, A. K., Al Eleq, A. H., Albaker, W. I., Brooks, A. W., Al-Sultan, A. I., Al-Rubaish, A. M., Alkharsah, K. R., Sulaiman, R. M., Al-Quorain, A. A., Cyrus, C., Alali, R. A., Vatte, et al  
2022; 22 (1): 301
- **KMT2D-NOTCH Mediates Coronary Abnormalities in Hypoplastic Left Heart Syndrome.** *Circulation research*  
Yu, Z., Zhou, X., Liu, Z., Pastrana-Gomez, V., Liu, Y., Guo, M., Tian, L., Nelson, T. J., Wang, N., Mital, S., Chitayat, D., Wu, J. C., Rabinovitch, et al  
2022: 101161CIRCRESAHA122320783
- **Precision environmental health monitoring by longitudinal exposome and multi-omics profiling.** *Genome research*  
Gao, P., Shen, X., Zhang, X., Jiang, C., Zhang, S., Zhou, X., Schüssler-Fiorenza Rose, S. M., Snyder, M.  
2022
- **Exploring disease interrelationships in patients with lymphatic disorders: A single center retrospective experience.** *Clinical and translational medicine*  
Rockson, S. G., Zhou, X., Zhao, L., Hosseini, D. K., Jiang, X., Sweatt, A. J., Kim, D., Tian, W., Snyder, M. P., Nicolls, M. R.  
2022; 12 (4): e760
- **Exploratory studies of oral and fecal microbiome in healthy human aging.** *Frontiers in aging*  
Zhou, X., Wang, B., Demkowicz, P. C., Johnson, J. S., Chen, Y., Spakowicz, D. J., Zhou, Y., Dorsett, Y., Chen, L., Sodergren, E., Kuchel, G. A., Weinstock, G. M.  
2022; 3: 1002405
- **The Impact of SARS-CoV-2 on the Human Immune System and Microbiome** *INFECTIOUS MICROBES & DISEASES*  
Wang, C., Zhou, X., Wang, M., Chen, X.  
2021; 3 (1): 14-21
- **Single-Cell Transcriptomic Analysis and Patient-Specific iPSCs Reveal Dysregulated Cell Cycle in Coronary Endothelial Cell in Hypoplastic Left Heart Syndrome**

Gu, M., Miao, Y., Zhou, X., Tian, L., Martin, M., Nelson, T. J.

LIPPINCOTT WILLIAMS & WILKINS.2020

- **Longitudinal Analysis of Serum Cytokine Levels and Gut Microbial Abundance Links IL-17/IL-22 with Clostridia and Insulin Sensitivity in Humans.** *Diabetes*  
Zhou, X. n., Johnson, J. S., Spakowicz, D. n., Zhou, W. n., Zhou, Y. n., Sodergren, E. n., Snyder, M. n., Weinstock, G. M.  
2020
- **New statistical method identifies cytokines that distinguish stool microbiomes.** *Scientific reports*  
Yang, D., Johnson, J., Zhou, X., Deych, E., Shands, B., Hanson, B., Sodergren, E., Weinstock, G., Shannon, W. D.  
2019; 9 (1): 20082
- **Estradiol Alters Hippocampal Gene Expression during the Estrous Cycle.** *Endocrine research*  
Iqbal, J., Tan, Z. N., Li, M. X., Chen, H. B., Ma, B., Zhou, X., Ma, X. M.  
2019: 1-18
- **Composition and predictive functional analysis of bacterial communities inhabiting Chinese Cordyceps insight into conserved core microbiome** *BMC MICROBIOLOGY*  
Xia, F., Zhou, X., Liu, Y., Li, Y., Bai, X., Zhou, X.  
2019; 19: 105
- **Longitudinal multi-omics of host-microbe dynamics in prediabetes.** *Nature*  
Zhou, W., Sailani, M. R., Contrepois, K., Zhou, Y., Ahadi, S., Leopold, S. R., Zhang, M. J., Rao, V., Avina, M., Mishra, T., Johnson, J., Lee-McMullen, B., Chen, et al  
2019; 569 (7758): 663–71
- **Impact of Age, Caloric Restriction, and Influenza Infection on Mouse Gut Microbiome: An Exploratory Study of the Role of Age-Related Microbiome Changes on Influenza Responses** *FRONTIERS IN IMMUNOLOGY*  
Bartley, J. M., Zhou, X., Kuchel, G. A., Weinstock, G. M., Haynes, L.  
2017; 8: 1164
- **SIMILAR BACTERIAL SIGNATURES IN INTESTINAL TISSUES, MILK, AND DENDRITIC CELLS OF LACTATING MICE SUGGEST A POSSIBLE ENTERO-MAMMARY PATHWAY**  
Zhou, X., Voigt, A., Paveglio, S., Weinstock, G., Matson, A., Davidovics, Z.  
W B SAUNDERS CO-ELSEVIER INC.2017: S172
- **Tropism of CPMV to Professional Antigen Presenting Cells Enables a Platform to Eliminate Chronic Infections** *ACS BIOMATERIALS SCIENCE & ENGINEERING*  
Wen, A. M., Le, N., Zhou, X., Steinmetz, N. F., Poplcin, D. L.  
2015; 1 (11): 1050–54
- **Langerhans Cell Hyperplasia From Molluscum Contagiosum.** *The American Journal of dermatopathology*  
Hatter, A. D., Zhou, X., Honda, K., Popkin, D. L.  
2015; 37 (8): e93-5
- **JcLEA, a Novel LEA-Like Protein from Jatropha curcas, Confers a High Level of Tolerance to Dehydration and Salinity in Arabidopsis thaliana** *PLOS ONE*  
Liang, J., Zhou, M., Zhou, X., Jin, Y., Xu, M., Lin, J.  
2013; 8 (12): e83056
- **Role of Lymphocytic Choriomeningitis Virus (LCMV) in Understanding Viral Immunology: Past, Present and Future** *VIRUSES-BASEL*  
Zhou, X., Ramachandran, S., Mann, M., Popkin, D. L.  
2012; 4 (11): 2650–69
- **Molecular cloning and functional analysis of the gene encoding geranylgeranyl diphosphate synthase from Jatropha curcas** *AFRICAN JOURNAL OF BIOTECHNOLOGY*  
Lin, J., Jin, Y., Zhou, X., Wang, J.  
2010; 9 (23): 3342–51
- **PURIFICATION AND CHARACTERIZATION OF CURCIN, A TOXIC LECTIN FROM THE SEED OF JATROPHA CURCAS** *PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY*

Lin, J., Zhou, X., Wang, J., Jiang, P., Tang, K.

2010; 40 (2): 107–18

- **Hepatoma Cell Growth Inhibition by Inducing Apoptosis with Polysaccharide Isolated from Turkey Tail Medicinal Mushroom, *Trametes versicolor* (L.: Fr.) Lloyd (Aphylophoromycetideae)** *INTERNATIONAL JOURNAL OF MEDICINAL MUSHROOMS*

Cai, X., Pi, Y., Zhou, X., Tian, L., Qiao, S., Lin, J.

2010; 12 (3): 257–63

- **Molecular cloning, characterization and functional analysis of a 3-hydroxy-3-methylglutaryl coenzyme A reductase gene from *Jatropha curcas*** *AFRICAN JOURNAL OF BIOTECHNOLOGY*

Lin, J., Jin, Y., Zhou, M., Zhou, X., Wang, J.

2009; 8 (15): 3455–62

- **AFLP analysis of genetic diversity in main cultivated strains of *Ganoderma* spp.** *AFRICAN JOURNAL OF BIOTECHNOLOGY*

Wu, S., Guo, X., Zhou, X., Li, X., Chen, Y., Lin, J.

2009; 8 (15): 3448–54