Stanford



Zeyuan Zhang

Postdoctoral Scholar, Hematology-Oncology

Bio

BIO

Zeyuan Zhang, Ph.D., is a Postdoctoral Scholar at Stanford University in the laboratory of Glaivy Batusli, where he is conducting research on the evolution of antibody development against the coagulation protein factor IX in hemophilia B disease models. He earned his Ph.D. in Biomedical Science from the University of Iowa, focusing on cell and developmental biology.

Dr. Zhang's research centers on the molecular mechanisms underlying metabolic disease, with particular emphasis on organelle dysfunction in obesity. His work has provided insights into GSNOR enzymatic activity, lysosomal dysfunction, and inflammatory stress in metabolic regulation. He has also investigated transcriptional mechanisms contributing to obesity-associated hepatic dysfunction and adipose tissue homeostasis. Prior to joining Stanford, he worked as a Scientist I at Altos Labs, where he studied hepatocyte-specific rejuvenation reprogramming in fatty liver disease.

His technical expertise includes multi-omics approaches, RNA sequencing, chromatin immunoprecipitation, high-resolution respirometry, advanced imaging techniques, and in vivo mouse models. He also has extensive experience in primary cell isolation and histological analysis.

Dr. Zhang is interested in translational research that connects molecular mechanisms to therapeutic strategies, with the goal of developing innovative treatments for metabolic diseases.

INSTITUTE AFFILIATIONS

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

HONORS AND AWARDS

- POSTDOCTORAL FELLOWSHIP, AMERICAN HEART ASSOCIATION (2026-2027)

PROFESSIONAL EDUCATION

- Master of Science, Iowa State University (2016)
- PhD, University of Iowa (2022)

STANFORD ADVISORS

- Glaivy Batsuli, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Glaivy Batsuli (3/11/2026)
- Katrin Svensson (5/1/2024 - - 3/10/2026)

Publications

PUBLICATIONS

- **15-PGDH inhibition promotes muscle repair and strength recovery during GLP-1 receptor agonist-induced weight loss.** *Proceedings of the National Academy of Sciences of the United States of America*
  Nalbandian, M., Lone, J., Le Moal, E., Kim, I., Jeuris, K., Li, Y. K., Kraft, P., Zhao, M., Koleckar, K., Zhang, Z., Svensson, K. J., Blau, H. M.
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- **15-PGDH Inhibition Overcomes Muscle Regenerative Deficit Seen With GLP1-Receptor Agonist-Induced Weight Loss.** *bioRxiv : the preprint server for biology*
  Nalbandian, M., Lone, J., Le Moal, E., Kim, I., Li, Y. K., Kraft, P., Zhao, M., Kolacar, K., Zhang, Z., Svensson, K. J., Blau, H. M.
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- **ANGPTL3 orchestrates hepatic fructose sensing and metabolism.** *Cell reports*
  Zhao, M., Linde-Garelli, K. Y., Zhang, Z., Toomer, D., Reghupaty, S. C., Jimenez, J. I., Coassolo, L., Wat, L. W., Fernandez, D., Svensson, K. J.
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- **Thermogenic Adipose ADH5 Counteracts Age-related Metabolic Decline.** *bioRxiv : the preprint server for biology*
  Sebag, S. C., Neff, T., Qian, Q., Asghari, A., Wang, Z., Zhang, Z., Li, M., Hao, M., Lira, V. A., Sun, H., Potthoff, M. J., Yang, L.
  2025
- **Discovery of peptides as key regulators of metabolic and cardiovascular crosstalk.** *Cell reports*
  Zhang, Z., Svensson, K. J.
  2025; 44 (6): 115836
- **Obesity disrupts the pituitary-hepatic UPR communication leading to NAFLD progression.** *Cell metabolism*
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- **A putative long noncoding RNA-encoded micropeptide maintains cellular homeostasis in pancreatic β cells.** *Molecular therapy. Nucleic acids*
  Li, M., Shao, F., Qian, Q., Yu, W., Zhang, Z., Chen, B., Su, D., Guo, Y., Phan, A. V., Song, L. S., Stephens, S. B., Sebag, J., Imai, et al
  2021; 26: 307-320
- **ADH5-mediated NO bioactivity maintains metabolic homeostasis in brown adipose tissue.** *Cell reports*
  Sebag, S. C., Zhang, Z., Qian, Q., Li, M., Zhu, Z., Harata, M., Li, W., Zingman, L. V., Liu, L., Lira, V. A., Potthoff, M. J., Bartelt, A., Yang, et al
  2021; 37 (7): 110003
- **The unfolded protein response regulates hepatic autophagy by sXBP1-mediated activation of TFEB.** *Autophagy*
  Zhang, Z., Qian, Q., Li, M., Shao, F., Ding, W. X., Lira, V. A., Chen, S. X., Sebag, S. C., Hotamisligil, G. S., Cao, H., Yang, L.
  2021; 17 (8): 1841-1855
- **Plasmid encoding microRNA-200c ameliorates periodontitis and systemic inflammation in obese mice.** *Molecular therapy. Nucleic acids*
  Krongbaramee, T., Zhu, M., Qian, Q., Zhang, Z., Eliason, S., Shu, Y., Qian, F., Akkouch, A., Su, D., Amendt, B. A., Yang, L., Hong, L.
  2021; 23: 1204-1216
- **Hepatic Lysosomal iNOS Activity Impairs Autophagy in Obesity.** *Cellular and molecular gastroenterology and hepatology*
  Qian, Q., Zhang, Z., Li, M., Savage, K., Cheng, D., Rauckhorst, A. J., Ankrum, J. A., Taylor, E. B., Ding, W. X., Xiao, Y., Cao, H. J., Yang, L.
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- **The Regulation of Sporopollenin Biosynthesis Genes for Rapid Pollen Wall Formation** *PLANT PHYSIOLOGY*
  Wang, K., Guo, Z., Zhou, W., Zhang, C., Zhang, Z., Lou, Y., Xiong, S., Yao, X., Fan, J., Zhu, J., Yang, Z.

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- **S-Nitrosoglutathione Reductase Dysfunction Contributes to Obesity-Associated Hepatic Insulin Resistance via Regulating Autophagy.** *Diabetes*
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