Stanford



Zehra Yildirim

Postdoctoral Scholar, Cardiovascular Institute

Bio

HONORS AND AWARDS

- K99/R00 Pathway to Independence Award, National Institutes of Health (NIH) (2026)
- Outstanding Postdoctoral Award, TRDRP Research Program (2025)
- Recognition Award, Stanford Cardiovascular Institute (CVI) (2025)
- Project Award, Stanford SLAC National Accelerator Laboratory (2024 – 2026)
- Postdoctoral Fellowship Award, Tobacco-Related Disease Research Program (TRDRP) (2023 – 2026)
- Postdoctoral Fellowship Award, American Heart Association (AHA) (2022 – 2023)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member Board, AHA Young Professionals Bay Area Division (2025 - present)
- Member, Bioengineering Science Committee, Council on Basic Cardiovascular Science, American Heart Association (AHA) (2025 - present)
- Chair, Stanford Inspiring Women in Science and Healthcare (iWISH-Talks) (2022 - present)
- Member, American Heart Association (AHA) (2022 - present)

STANFORD ADVISORS

- Joseph Wu, Postdoctoral Faculty Sponsor

PATENTS

- Zehra Yildirim, Ebru Erbay. "United States Patent 18/834,683 Targeting ire1 kinase and fmrp for prophylaxis, management and treatment of atherosclerosis", Cedars Sinai Medical Center, May 1, 2025

Publications

PUBLICATIONS

- **Gastruloids enable modeling of the earliest stages of human cardiac and hepatic vascularization.** *Science (New York, N.Y.)*
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  2025; 388 (6751): eadu9375
- **Framework for Cultivating Leadership and Driving Growth.** *Circulation*
  Vacante, F., Yildirim, Z., Wu, J. C.
  2025; 151 (7): 430-432
- **Protocol to study electrophysiological properties of hPSC-derived 3D cardiac organoids using MEA and sharp electrode techniques.** *STAR protocols*

Venkateshappa, R., Yildirim, Z., Zhao, S. R., Wu, M. A., Vacante, F., Abilez, O. J., Wu, J. C.
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- **Next-Gen Therapeutics: Pioneering Drug Discovery with iPSCs, Genomics, AI, and Clinical Trials in a Dish.** *Annual review of pharmacology and toxicology*
  Yildirim, Z., Swanson, K., Wu, X., Zou, J., Wu, J.
  2024
- **Clinical trials in-a-dish for cardiovascular medicine.** *European heart journal*
  Wu, X., Swanson, K., Yildirim, Z., Liu, W., Liao, R., Wu, J. C.
  2024
- **Generation of two iPSC lines from long QT syndrome patients carrying SNTA1 variants.** *Stem cell research*
  Jimenez-Tellez, N., Vera, C. D., Yildirim, Z., Vicente Guevara, J., Zhang, T., Wu, J. C.
  2022; 66: 103003
- **Generation of two induced pluripotent stem cell lines from dilated cardiomyopathy patients caused by heterozygous mutations in the HCN4 gene.** *Stem cell research*
  Yildirim, Z., Kojic, A., Yan, C. D., Wu, M. A., Vagelos, R., Wu, J. C.
  2022; 65: 102951
- **ER Stress-Induced Sphingosine-1-Phosphate Lyase Phosphorylation Potentiates the Mitochondrial Unfolded Protein Response.** *Journal of lipid research*
  Yildirim, A. D., Citir, M., Dogan, A. E., Veli, Z., Yildirim, Z., Tufanli, O., Traynor Kaplan, A., Schultz, C., Erbay, E.
  2022: 100279
- **PACT Establishes a Post-transcriptional Brake on Mitochondrial Biogenesis by Promoting the Maturation of miR-181c.** *The Journal of biological chemistry*
  Dogan, A. E., Hamid, S. M., Yildirim, A. D., Yildirim, Z., Sen, G., Riera, C. E., Gottlieb, R. A., Erbay, E.
  2022: 102050
- **Intercepting IRE1 kinase-FMRP signaling prevents atherosclerosis progression** *EMBO MOLECULAR MEDICINE*
  Yildirim, Z., Baboo, S., Hamid, S. M., Dogan, A. E., Tufanli, O., Robichaud, S., Emerton, C., Diedrich, J. K., Vatandaslar, H., Nikolos, F., Gu, Y., Iwawaki, T., Tarling, et al
  2022: e15344
- **S-Adenosylmethionine Inhibits La Ribonucleoprotein Domain Family Member 1 in Murine Liver and Human Liver Cancer Cells.** *Hepatology (Baltimore, Md.)*
  Ramani, K., Robinson, A. E., Berlind, J., Fan, W., Abeynayake, A., Binek, A., Barbier-Torres, L., Noureddin, M., Nissen, N. N., Yildirim, Z., Erbay, E., Mato, J. M., Van Eyk, et al
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- **Inositol-requiring enzyme-1 regulates phosphoinositide signaling lipids and macrophage growth** *EMBO REPORTS*
  Hamid, S., Citir, M., Terzi, E., Cimen, I., Yildirim, Z., Dogan, A., Kocaturk, B., Onat, U., Arditi, M., Weber, C., Traynor-Kaplan, A., Schultz, C., Erbay, et al
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- **Double bond configuration of palmitoleate is critical for atheroprotection** *MOLECULAR METABOLISM*
  Cimen, I., Yildirim, Z., Dogan, A., Yildirim, A., Tufanli, O., Onat, U., UyenThao Nguyen, Watkins, S. M., Weber, C., Erbay, E.
  2019; 28: 58-72
- **Periplasmic and extracellular production of cellulase from recombinant Escherichia coli cells** *JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY*
  Yildirim, Z., Celik, E.
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