Stanford

Nerea Jimenez Tellez

Postdoctoral Scholar, Cardiovascular Institute

Bio

BIO

Nerea is a Postdoctoral Scholar at Dr. Joseph Wu's lab. She earned her Bachelor's degree in Biochemistry at Universidad Complutense de Madrid (Spain). She was in an exchange program at the University of Saskatchewan (Canada) where she completed her Honours Thesis project on the Regulation of the Metastasis Suppressor Protein CREB3L1 in Dr. Deborah H Anderson's lab. She received her Masters' degree at Universidad de Alcalá (Spain) working at Dr. Isabel Liste Noya's lab on The role of p27Kip1 in the pluripotency and differentiation of dopaminergic neurons. She obtained her Ph.D. in Dr. Naweed Syed's lab studying the Cellular and molecular mechanisms underlying anesthetic-induced cytotoxicity, and their impact on learning and memory. She has received an ATRAC postdoctoral fellowship (Aug 2022 - Aug 2023), an AHA postdoctoral fellowship (Apr 2023 - Sept 2024) and currently holds a TRDRP Postdoctoral Fellowship (Jul 2024 - Jun 2027) titled "Using a human in vitro platform to study the effects of cannabinoids on the cardiovascular system" .

HONORS AND AWARDS

- CVI Recognition Award for Early Career Scientists, Stanford Cardiovascular Institute (Mar 2026)
- CVI Travel Award, Stanford Cardiovascular Institute (Aug 2025)
- TRDRP Postdoctoral Fellowship, Tobacco-Related Disease Research Program (July 2024)
- CVI Travel Award, Stanford Cardiovascular Institute (May 2023)
- AHA Postdoctoral Fellowship, American Heart Association (April 2023)
- ATRAC postdoctoral fellowship, AHA Tobacco Center for Regulatory Science (Sept 2022)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Calgary (2022)
- Master of Science, Universidad De Alcala De Henares (2017)
- Bachelor of Science, Universidad Complutense Madrid (2016)
- BSc, University of Saskatchewan , Honors Thesis (2016)

STANFORD ADVISORS

- Joseph Wu, Postdoctoral Faculty Sponsor

COMMUNITY AND INTERNATIONAL WORK

- iWISH talks

LINKS

- LinkedIn: https://www.linkedin.com/in/nerea-jimenez-tellez/
- Research Gate: https://www.researchgate.net/profile/Nerea-Jimenez-Tellez

Publications

PUBLICATIONS

- **NEREA: A versatile computer vision-based software for analyzing angiogenesis.** *Cardiovascular research*
  Jimenez-Tellez, N., Casas-Ortiz, A., Vacante, F., Yang, X., Obejero-Paz, C., Wu, J. C.
  2026

- **A holistic framework to create intelligent systems for psychomotor learning: a systematic review and insights from the virtual reality Kenpo learning simulator** *VIRTUAL REALITY*
  Casas-Ortiz, A., Jimenez-Tellez, N., Portaz, M., Santos, O. C.
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- **Differential Effects of Natural and Synthetic Cannabinoids on Endothelial Barrier Integrity and Function: Insights from iPSC-Derived Endothelial Cells**
  Jimenez-Tellez, N., Obejero-Paz, C., Wu, J.
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Association of Endothelial Dysfunction With Chronic Marijuana Smoking and THC-Edible Use.** *JAMA cardiology*
  Mohammadi, L., Navabzadeh, M., Jiménez-Téllez, N., Han, D. D., Reagan, E., Naughton, J., Zhou, L. Y., Almeida, R., Castaneda, L. M., Abdelaal, S. A., Park, K. S., Uyemura, K., Cheung, et al
  2025

- **The relationship between cannabis and cardiovascular disease: clearing the haze.** *Nature reviews. Cardiology*
  Chandy, M., Jimenez-Tellez, N., Wu, J. C.
  2025

- **Transcriptomic analysis of nicotine on the cardiovascular system using a diverse population of human induced pluripotent stem cell-derived endothelial cells.** *Journal of molecular and cellular cardiology*
  Jimenez-Tellez, N., Williams, D., Liu, Y., Wang, M., Chandy, M., Wu, J. C.
  2024; 198: 21-23

- **Addressing Cardiovascular Toxicity Risk of Electronic Nicotine Delivery Systems in the Twenty-First Century: "What Are the Tools Needed for the Job?" and "Do We Have Them?".** *Cardiovascular toxicology*
  Chandy, M., Hill, T., Jimenez-Tellez, N., Wu, J. C., Sarles, S. E., Hensel, E., Wang, Q., Rahman, I., Conklin, D. J.
  2024

- **Exploring the Impact of Partial Occlusion on Emotion Classification From Facial Expressions: A Comparative Study of XR Headsets and Face Masks** *IEEE Access*
  Casas-Ortiz, A., Echeverria, J., Jimenez-Tellez, N., Santos, O. C.
  2024; 12: 44613 - 44627

- **Sevoflurane Exposure in Neonates Perturbs the Expression Patterns of Specific Genes That May Underly the Observed Learning and Memory Deficits.** *International journal of molecular sciences*
  Jimenez-Tellez, N., Pehar, M., Visser, F., Casas-Ortiz, A., Rice, T., Syed, N. I.
  2023; 24 (10)

- **Dexmedetomidine Pre-Treatment of Neonatal Rats Prevents Sevoflurane-Induced Deficits in Learning and Memory in the Adult Animals.** *Biomedicines*
  Jimenez-Tellez, N., Pehar, M., Iqbal, F., Casas-Ortiz, A., Rice, T., Syed, N. I.
  2023; 11 (2)

- **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

- **Dexmedetomidine does not compromise neuronal viability, synaptic connectivity, learning and memory in a rodent model** *SCIENTIFIC REPORTS*

  Jimenez-Tellez, N., Iqbal, F., Pehar, M., Casas-Ortiz, A., Rice, T., Syed, N.

  2021; 11 (1): 16153

- **A synthetic peptide rescues rat cortical neurons from anesthetic-induced cell death, perturbation of growth and synaptic assembly** *SCIENTIFIC REPORTS*

  Iqbal, F., Pehar, M., Thompson, A. J., Azeem, U., Jahanbakhsh, K., Jimenez-Tellez, N., Sabouny, R., Batool, S., Syeda, A., Chow, J., Machiraju, P., Shutt, T., Yusuf, et al

  2021; 11 (1): 4567

- **SS-31 Peptide Reverses the Mitochondrial Fragmentation Present in Fibroblasts From Patients With DCMA, a Mitochondrial Cardiomyopathy** *FRONTIERS IN CARDIOVASCULAR MEDICINE*

  Machiraju, P., Wang, X., Sabouny, R., Huang, J., Zhao, T., Iqbal, F., King, M., Prasher, D., Lodha, A., Jimenez-Tellez, N., Ravandi, A., Argiropoulos, B., Sinasac, et al

  2019; 6: 167

- **Cellular models for human cardiomyopathy: What is the best option?** *WORLD JOURNAL OF CARDIOLOGY*

  Jimenez-Tellez, N., Greenway, S. C.

  2019; 11 (10): 221-235