Stanford

Aneysis D. Gonzalez-Suarez, Ph.D.

MD Student with Scholarly Concentration in Molecular Basis of Medicine / Neuroscience, Behavior, and Cognition, expected graduation Spring 2027

Publications

PUBLICATIONS

- **Excitatory and inhibitory neural dynamics jointly tune motion detection** *Current Biology*
  Gonzalez-Suarez, A. D., Zavatone-Veth, J. A., Chen, J., Matulis, C. A., Badwan, B. A., Clark, D. A.
  2022: 3659-3675.e8
- **RIM-BPs mediate tight coupling of action potentials to Ca2 -triggered neurotransmitter release** *Neuron*
  Acuna, C., Liu, X., Gonzalez, A., Sudhof, T. C.
  2015; 87 (6): 1234-1247
- **Effect of Postoperative Nonsteroidal Anti-Inflammatory Drug Use on Surgical Outcomes in Multi- and Single-Level Posterior Cervical Fusions.** *Spine surgery and related research*
  D Gonzalez-Suarez, A., Green, A., José Cavagnaro, M., Moya, E., Zygourakis, C., M Desai, A.
  2025; 9 (5): 498-508
- **Patient-specific 3D reconstruction models for sacral tumor resection: illustrative cases.** *Journal of neurosurgery. Case lessons*
  Sanker, V., Gonzalez-Suarez, A. D., Innocenti, N., Cavagnaro, M. J., Jeon, I., Zygourakis, C., Desai, A.
  2025; 9 (23)
- **From conference to career: Tracing medical pathways of Stanford university's minority medical alliance (SUMMA) premedical conference alumni.** *Journal of the National Medical Association*
  Gonzalez-Suarez, A. D., Moya, E., Perez, F. D., Gutierrez, M., Thomas, R. P.
  2025
- **Association Between Nonsteroidal Anti-inflammatory Drugs Use and Surgical Outcomes Following Posterior Lumbar Fusion: A Medical Claims Database Analysis.** *International journal of spine surgery*
  Gonzalez-Suarez, A. D., Green, A., Cavagnaro, M. J., Moya, E., Zygourakis, C., Desai, A. M.
  2025
- **Determining critical monitoring periods for accurate wearable step counts in patients with degenerative spine disorders.** *Scientific reports*
  Gonzalez-Suarez, A. D., Maldaner, N., Tang, M., Fatemi, P., Leung, C., Desai, A., Tomkins-Lane, C., Han, S. S., Zygourakis, C.
  2024; 14 (1): 19988
- **Analyzing Large Language Models' Responses to Common Lumbar Spine Fusion Surgery Questions: A Comparison Between ChatGPT and Bard.** *Neurospine*
  Lang, S. P., Yoseph, E. T., Gonzalez-Suarez, A. D., Kim, R., Fatemi, P., Wagner, K., Maldaner, N., Stienen, M. N., Zygourakis, C. C.
  2024; 21 (2): 633-641
- **Using Machine Learning Models to Identify Factors Associated With 30-Day Readmissions After Posterior Cervical Fusions: A Longitudinal Cohort Study.** *Neurospine*
  Gonzalez-Suarez, A. D., Rezaii, P. G., Herrick, D., Tigchelaar, S. S., Ratliff, J. K., Rusu, M., Scheinker, D., Jeon, I., Desai, A. M.
  2024

- **Standardizing Continuous Physical Activity Monitoring in Patients with Cervical Spondylosis.** *Spine*
  Maldaner, N., Gonzalez-Suarez, A. D., Tang, M., Fatemi, P., Leung, C., Desai, A., Tomkins-Lane, C., Zygourakis, C.
  2024

- **Automated Labeling of Spondylolisthesis Cases through Spinal MRI Radiology Report Interpretation using ChatGPT**
  Moallem, G., Gonzalez, A., Desai, A., Rusu, M.
  edited by Chen, W., Astley, S. M.
  SPIE-INT SOC OPTICAL ENGINEERING.2024

- **Patient perspectives on AI: a pilot study comparing large language model and physician-generated responses to routine cervical spine surgery questions** *Artificial Intelligence Surgery*
  Yoseph, E. T., Gonzalez-Suarez, A. D., Lang, S., Desai, A., Hu, S. S., Zygourakis, C. C.
  2024

- **Addressing Vaccination Gaps through Student-Led Initiatives: A Study of Stanford Vax Crew's Impact** *Journal of Student-Run Clinics*
  Murtagh, C., Gonzalez-Suarez, A., Zulman, D. M.
  2024; 10 (1)

- **PharmGKB summary: disulfiram pathway.** *Pharmacogenetics and genomics*
  Gonzalez-Suarez, A. D., Thorn, C. F., Whirl-Carrillo, M., Klein, T. E.
  2023

- **Manipulating Neural Dynamics to Tune Motion Computation in Drosophila**
  Gonzalez-Suarez, A. D.
  Yale Graduate School of Arts and Sciences Dissertations.2022

- **Manipulating neural dynamics to tune motion detection**
  Gonzalez-Suarez, A. D., Zavatone-Veth, J. A., Chen, J., Matulis, C. A., Badwan, B. A., Clark, D. A.
  Cold Spring Harbor Laboratory. bioRxiv; https://doi.org/10.1101/2021.11.02.466844.
  2021

- **Transport rate of EAAT2 is regulated by amino acid located at the interface between the scaffolding and substrate transport domains** *NEUROCHEMISTRY INTERNATIONAL*
  Duffield, M., Patel, A., Mortensen, O., Schnur, D., Gonzalez-Suarez, A. D., Torres-Salazar, D., Fontana, A. C. K.
  2020; 139: 104792

- **Spatiotemporally precise optogenetic activation of sensory neurons in freely walking Drosophila** *ELIFE*
  DeAngelis, B. D., Zavatone-Veth, J. A., Gonzalez-Suarez, A. D., Clark, D. A.
  2020; 9

- **Heterogeneous Temporal Contrast Adaptation in Drosophila Direction-Selective Circuits** *CURRENT BIOLOGY*
  Matulis, C. A., Chen, J., Gonzalez-Suarez, A. D., Behnia, R., Clark, D. A.
  2020; 30 (2): 222-+

- **Peptide-Mediated Neurotransmission Takes Center Stage** *TRENDS IN NEUROSCIENCES*
  Gonzalez-Suarez, A. D., Nitabach, M. N.
  2018; 41 (6): 325-327

- **Substrate transport and anion permeation proceed through distinct pathways in glutamate transporters** *ELIFE*
  Cheng, M., Torres-Salazar, D., Gonzalez-Suarez, A. D., Amara, S. G., Bahar, I.
  2017; 6

- **Glial and Neuronal Glutamate Transporters Differ in the Na+ Requirements for Activation of the Substrate-Independent Anion Conductance** *FRONTIERS IN MOLECULAR NEUROSCIENCE*
  Divito, C. B., Borowski, J. E., Glasgow, N. G., Gonzalez-Suarez, A. D., Torres-Salazar, D., Johnson, J. W., Amara, S. G.
  2017; 10: 150

- **Insights into the Gating Mechanism of Excitatory Amino Acid Transporters-Associated Anion Channel**
  Torres-Salazar, D., Poblete, H., Gonzalez-Suarez, A., Vergara-Jaque, A., Garcia-Olivares, J., Comer, J., Amara, S. G.
  CELL PRESS.2017: 336A

- **Emerging Evidence for a Direct Link between EAAT-Associated Anion Channels and Neurological Disorders** *JOURNAL OF NEUROSCIENCE*
  Gonzalez-Suarez, A. D., Nash, A. I., Garcia-Olivares, J., Torres-Salazar, D.
  2017; 37 (2): 241-243
- **Transport and channel functions in EAATs: the missing link** *CHANNELS*
  Torres-Salazar, D., Gonzalez-Suarez, A. D. M., Amara, S. G.
  2016; 10 (2): 86-87
- **Elucidating the Anion Channel Gating Mechanism in Excitatory Amino Acid Transporters**
  Salazar, D., Poblete, H., Gonzalez, A., Vergara-Jaque, A., Comer, J., Amara, S. G.
  CELL PRESS.2016: 137A