Stanford

Lehi Acosta-Alvarez

- MD Student, expected graduation Spring 2027
- Ph.D. Student in Cancer Biology, admitted Summer 2021
- MSTP Student

Publications

PUBLICATIONS

- **Host genotype and sex shape influenza evolution and defective viral genomes.** *Nature communications*
  Costa, R. M., Acosta-Alvarez, L., Curtis, K., Zarbock, K., Kelleher, J., Lamichhane, B. S., Valesano, A. L., Fitzsimmons, W. J., Lauring, A. S., Seger, J., Adler, F. R., Potts, W. K.
  2026

- **Dysregulated Microglial Synaptic Engulfment in Diffuse Midline Glioma.** *bioRxiv : the preprint server for biology*
  Mancusi, R., Tatlock, E., Shamardani, K., Acosta-Alvarez, L., Drexler, R., Trivedi, V., Gavish, A., Niizuma, K., Soni, N., Woo, P., Mulinyawe, S., Jahan, S., Logan, et al
  2025

- **Neuronal activity-dependent mechanisms of small cell lung cancer pathogenesis.** *Nature*
  Savchuk, S., Gentry, K. M., Wang, W., Carleton, E., Biagi-Junior, C. A., Luthria, K., Yalçın, B., Ni, L., Farnsworth, H. C., Davis, R. A., Drexler, R., Melms, J. C., Liu, et al
  2025

- **Immunotherapy-related cognitive impairment after CAR T cell therapy in mice.** *Cell*
  Geraghty, A. C., Acosta-Alvarez, L., Rotiroti, M. C., Dutton, S., O'Dea, M. R., Kim, W., Trivedi, V., Mancusi, R., Shamardani, K., Malacon, K., Woo, P. J., Martinez-Velez, N., Pham, et al
  2025

- **Influenza virus evolution and defective genome formation are shaped by host genotype and sex.** *bioRxiv : the preprint server for biology*
  Costa, R. M., Acosta-Alvarez, L., Curtis, K., Zarbock, K., Kelleher, J., Lamichhane, B. S., Valesano, A. L., Fitzsimmons, W. J., Lauring, A. S., Seger, J., Adler, F. R., Potts, W. K.
  2025

- **NEURONAL-ACTIVITY DEPENDENT MECHANISMS OF SMALL CELL LUNG CANCER PATHOGENESIS**
  Savchuk, S., Wang, W., Gentry, K., Carleton, E., Biagi, C., Yalcin, B., Ni, L., Farnsworth, H., Davis, R., Liu, Y., Acosta-Alvarez, L., Hartmann, G., Pavarino, et al
  OXFORD UNIV PRESS INC.2024

- **Immunotherapy-related cognitive impairment after CAR T cell therapy in mice.** *bioRxiv : the preprint server for biology*
  Geraghty, A. C., Acosta-Alvarez, L., Rotiroti, M., Dutton, S., O'Dea, M. R., Woo, P. J., Xu, H., Shamardani, K., Mancusi, R., Ni, L., Mulinyawe, S. B., Kim, W. J., Liddelow, et al
  2024

- **Training the next generation of community-engaged physicians: a mixed-methods evaluation of a novel course for medical service learning in the COVID-19 era.** *BMC medical education*
  Scala, J. J., Cha, H., Shamardani, K., Rashes, E. R., Acosta-Alvarez, L., Mediratta, R. P.
  2024; 24 (1): 426

- **Basal stem cell progeny establish their apical surface in a junctional niche during turnover of an adult barrier epithelium.** *Nature cell biology*
  Galenza, A., Moreno-Roman, P., Su, Y. H., Acosta-Alvarez, L., Debec, A., Guichet, A., Knapp, J. M., Kizilyaprak, C., Humbel, B. M., Kolotuev, I., O'Brien, L. E.

2023

- **Multifocal demyelinating leukoencephalopathy and oligodendroglial lineage cell loss with immune effector cell-associated neurotoxicity syndrome (ICANS) following CD19 CAR T-cell therapy for mantle cell lymphoma.** *Journal of neuropathology and experimental neurology*
  Nie, E. H., Ahmadian, S. S., Bharadwaj, S. N., Acosta-Alvarez, L., Threlkeld, Z. D., Frank, M. J., Miklos, D. B., Monje, M., Scott, B. J., Vogel, H.
  2023

- **Mild respiratory COVID can cause multi-lineage neural cell and myelin dysregulation.** *Cell*
  Fernández-Castañeda, A., Lu, P., Geraghty, A. C., Song, E., Lee, M. H., Wood, J., O'Dea, M. R., Dutton, S., Shamardani, K., Nwangwu, K., Mancusi, R., Yalçın, B., Taylor, et al
  2022

- **Multifocal demyelinating leukoencephalopathy and oligodendroglial lineage cell loss with CD19 CAR T-cell lymphoma therapy**
  Nie, E., Ahmadian, S., Bharadwaj, S., Acosta-Alvarez, L., Threlkeld, Z., Frank, M., Miklos, D., Born, D., Scott, B., Monje, M., Vogel, H.
  OXFORD UNIV PRESS INC.2022: 464

- **Mild respiratory SARS-CoV-2 infection can cause multi-lineage cellular dysregulation and myelin loss in the brain.** *bioRxiv : the preprint server for biology*
  Fernández-Castañeda, A., Lu, P., Geraghty, A. C., Song, E., Lee, M. H., Wood, J., Yalçın, B., Taylor, K. R., Dutton, S., Acosta-Alvarez, L., Ni, L., Contreras-Esquivel, D., Gehlhausen, et al
  2022

- **The small GTPase ARF6 activates PI3K in melanoma to induce a pro-metastatic state.** *Cancer research*
  Yoo, J. H., Brady, S. W., Acosta-Alvarez, L., Rogers, A., Peng, J., Sorensen, L. K., Wolff, R. K., Mleynek, T., Shin, D., Rich, C. P., Kircher, D. A., Bild, A., Odelberg, et al
  2019