Stanford



Matine M. Azadian

MD Student with Scholarly Concentration in Bioengineering / Surgery, expected graduation Spring 2029

Bio

BIO

Current student in the Stanford Neurosciences Interdepartmental Program (IDP).

HONORS AND AWARDS

- Predoctoral Fellow, Ford Foundation, National Academy of Sciences (2021)
- Science and Technology Fellow, United States Coast Guard (2020)
- Future Leader in Science, Sanofi Institut Pasteur Award (2017)
- U.S. Presidential Champion of Change, The White House, Obama Administration (2016)
- Chancellor's Award of Distinction, University of California (2016)
- Highest Achievement in Academic Excellence, University of California (2016)
- Excellence in Research Distinction, University of California (2016)
- Academic Scholarship, Anthem Blue Cross (2014)
- Named One of 10 Students Who Will Change the World, University of California (2014)
- Endowed Research Award, Bill and Melinda Gates Foundation (2013)

EDUCATION AND CERTIFICATIONS

- PhD, Stanford University School of Medicine , Neuroscience (2024)
- BA, University of California at Irvine , Medical Anthropology (2018)

Publications

PUBLICATIONS

- **Clearance of intracranial debris by ultrasound reduces inflammation and improves outcomes in hemorrhagic stroke models.** *Nature biotechnology*

  Azadian, M. M., Kiani Shabestari, S., Rajan, A., Martinez, P. J., Macedo, N., Markarian, E., Xiang, Y., Yu, B. J., George, P. M., Fame, R. M., Airan, R. D.

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- **Acoustically activatable liposomes as a translational nanotechnology for site-targeted drug delivery and noninvasive neuromodulation.** *Nature nanotechnology*

  Purohit, M. P., Yu, B. J., Roy, K. S., Xiang, Y., Ewbank, S. N., Azadian, M. M., Hart, A. R., Muwanga, G. P., Martinez, P. J., Wang, J. B., Taoube, A. K., Markarian, E., Macedo, et al

  2025

- **Changing genes, cells and networks to reprogram the brain after stroke.** *Nature neuroscience*
  Li, W., George, P., Azadian, M. M., Ning, M., Dhand, A., Cramer, S. C., Carmichael, S. T., Lo, E. H.
  2025
- **Neurogenesis** *Encyclopedia of the Human Brain*
  Azadian, M. M., George, P. M.
  Elsevier.2025; 2: 647-662
- **Sex dependence of opioid-mediated responses to subanesthetic ketamine in rats.** *Nature communications*
  Di Ianni, T., Ewbank, S. N., Levinstein, M. R., Azadian, M. M., Budinich, R. C., Michaelides, M., Airan, R. D.
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- **Wirelessly Powered-Electrically Conductive Polymer System for Stem Cell Enhanced Stroke Recovery** *ADVANCED ELECTRONIC MATERIALS*
  Santhanam, S., Chen, C., Oh, B., McConnell, K. W., Azadian, M. M., Patel, J. J., Gardner, E. E., Tanabe, Y., Poon, A. S. Y., George, P. M.
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- **Noninvasive ultrasonic induction of cerebrospinal fluid flow enhances intrathecal drug delivery.** *Journal of controlled release : official journal of the Controlled Release Society*
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- **Electrical modulation of transplanted stem cells improves functional recovery in a rodent model of stroke.** *Nature communications*
  Oh, B., Santhanam, S., Azadian, M., Swaminathan, V., Lee, A. G., McConnell, K. W., Levinson, A., Song, S., Patel, J. J., Gardner, E. E., George, P. M.
  2022; 13 (1): 1366
- **Conducting polymer-based granular hydrogels for injectable 3D cell scaffolds.** *Advanced materials technologies*
  Feig, V. R., Santhanam, S., McConnell, K. W., Liu, K., Azadian, M., Brunel, L. G., Huang, Z., Tran, H., George, P. M., Bao, Z.
  2021; 6 (6)
- **Overnight Caloric Restriction Prior to Cardiac Arrest and Resuscitation Leads to Improved Survival and Neurological Outcome in a Rodent Model.** *Frontiers in neuroscience*
  Azadian, M., Tian, G., Bazrafkan, A., Maki, N., Rafi, M., Chetty, N., Desai, M., Otarola, I., Aguirre, F., Zaher, S. M., Khan, A., Suri, Y., Wang, et al
  2020; 14: 609670
- **Adolescent Vulnerability to Heightened Emotional Reactivity and Anxiety After Brief Exposure to an Obesogenic Diet.** *Frontiers in neuroscience*
  Vega-Torres, J. D., Azadian, M., Rios-Orsini, R. A., Reyes-Rivera, A. L., Ontiveros-Angel, P., Figueroa, J. D.
  2020; 14: 562
- **Recovery from Coma Post-Cardiac Arrest Is Dependent on the Orexin Pathway** *JOURNAL OF NEUROTRAUMA*
  Kang, Y., Tian, G., Bazrafkan, A., Farahabadi, M. H., Azadian, M., Abbasi, H., Shamaoun, B. E., Steward, O., Akbari, Y.
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