Stanford



Sepideh Kiani Shabestari

Postdoctoral Scholar, Neurology and Neurological Sciences

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California Irvine (2024)
- PhD, University of California Irvine , Neuroscience, Neurobiology and Behavior (2024)
- BS, University of California Irvine , Biological sciences (2019)

STANFORD ADVISORS

- Paul George, Postdoctoral Faculty Sponsor

Research & Scholarship

RESEARCH INTERESTS

- Brain and Learning Sciences

Publications

PUBLICATIONS

- **Therapeutic Post Stroke TIM1 Blockade Reduces Neuroinflammation and Improves Functional Recovery**
  Kiani Shabestari, S., Iliopoulou, B., Azadian, M., Thompson, K., Meyer, E., George, P.
  LIPPINCOTT WILLIAMS & WILKINS.2026
- **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.
  2025
- **Spatial and single-nucleus transcriptomic analysis of genetic and sporadic forms of Alzheimer's Disease.** *bioRxiv : the preprint server for biology*
  Miyoshi, E., Morabito, S., Henningfield, C. M., Rahimzadeh, N., Kiani Shabestari, S., Das, S., Michael, N., Reese, F., Shi, Z., Cao, Z., Scarfone, V., Arreola, M. A., Lu, et al
  2023
- **Author Correction: Gene expression and functional deficits underlie TREM2-knockout microglia responses in human models of Alzheimer's disease.** *Nature communications*
  McQuade, A., Kang, Y. J., Hasselmann, J., Jairaman, A., Sotelo, A., Coburn, M., Shabestari, S. K., Chadarevian, J. P., Fote, G., Tu, C. H., Danhash, E., Silva, J., Martinez, et al
  2023; 14 (1): 1194

- **The P522R protective variant of PLCG2 promotes the expression of antigen presentation genes by human microglia in an Alzheimer's disease mouse model.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
  Claes, C., England, W. E., Danhash, E. P., Kiani Shabestari, S., Jairaman, A., Chadarevian, J. P., Hasselmann, J., Tsai, A. P., Coburn, M. A., Sanchez, J., Lim, T. E., Hidalgo, J. L., Tu, et al
  2022; 18 (10): 1765-1778

- **Absence of microglia promotes diverse pathologies and early lethality in Alzheimer's disease mice.** *Cell reports*
  Kiani Shabestari, S., Morabito, S., Danhash, E. P., McQuade, A., Sanchez, J. R., Miyoshi, E., Chadarevian, J. P., Claes, C., Coburn, M. A., Hasselmann, J., Hidalgo, J., Tran, K. N., Martini, et al
  2022; 39 (11): 110961

- **Using Advanced Diffusion-Weighted Imaging to Predict Cell Counts in Gray Matter: Potential and Pitfalls.** *Frontiers in neuroscience*
  Radhakrishnan, H., Shabestari, S. K., Blurton-Jones, M., Obenaus, A., Stark, C. E.
  2022; 16: 881713

- **Immunogenicity of MultiTEP-Platform-Based Recombinant Protein Vaccine, PV-1950R, Targeting Three B-Cell Antigenic Determinants of Pathological α-Synuclein.** *International journal of molecular sciences*
  Zagorski, K., Chailyan, G., Hovakimyan, A., Antonyan, T., Kiani Shabestari, S., Petrushina, I., Davtyan, H., Cribbs, D. H., Blurton-Jones, M., Masliah, E., Agadjanyan, M. G., Ghochikyan, A.
  2022; 23 (11)

- **A kinase-dead Csf1r mutation associated with adult-onset leukoencephalopathy has a dominant inhibitory impact on CSF1R signalling.** *Development (Cambridge, England)*
  Stables, J., Green, E. K., Sehgal, A., Patkar, O. L., Keshvari, S., Taylor, I., Ashcroft, M. E., Grabert, K., Wollscheid-Lengeling, E., Szymkowiak, S., McColl, B. W., Adamson, A., Humphreys, et al
  2022; 149 (8)

- **Plaque-associated human microglia accumulate lipid droplets in a chimeric model of Alzheimer's disease.** *Molecular neurodegeneration*
  Claes, C., Danhash, E. P., Hasselmann, J., Chadarevian, J. P., Shabestari, S. K., England, W. E., Lim, T. E., Hidalgo, J. L., Spitale, R. C., Davtyan, H., Blurton-Jones, M.
  2021; 16 (1): 50

- **Gene expression and functional deficits underlie TREM2-knockout microglia responses in human models of Alzheimer's disease.** *Nature communications*
  McQuade, A., Kang, Y. J., Hasselmann, J., Jairaman, A., Sotelo, A., Coburn, M., Shabestari, S. K., Chadarevian, J. P., Fote, G., Tu, C. H., Danhash, E., Silva, J., Martinez, et al
  2020; 11 (1): 5370

- **Controlled Release of Stem Cell Secretome Attenuates Inflammatory Response against Implanted Biomaterials.** *Advanced healthcare materials*
  Mohammadi, M., Luong, J. C., Rodriguez, S. M., Cao, R., Wheeler, A. E., Lau, H., Li, S., Shabestari, S. K., Chadarevian, J. P., Alexander, M., de Vos, P., Zhao, W., Lakey, et al
  2020; 9 (12): e1901874

- **Testing a MultiTEP-based combination vaccine to reduce Aβ and tau pathology in Tau22/5xFAD bigenic mice.** *Alzheimer's research & therapy*
  Davtyan, H., Hovakimyan, A., Kiani Shabestari, S., Antonyan, T., Coburn, M. A., Zagorski, K., Chailyan, G., Petrushina, I., Svystun, O., Danhash, E., Petrovsky, N., Cribbs, D. H., Agadjanyan, et al
  2019; 11 (1): 107

- **A MultiTEP platform-based epitope vaccine targeting the phosphatase activating domain (PAD) of tau: therapeutic efficacy in PS19 mice.** *Scientific reports*
  Hovakimyan, A., Antonyan, T., Shabestari, S. K., Svystun, O., Chailyan, G., Coburn, M. A., Carlen-Jones, W., Petrushina, I., Chadarevian, J. P., Zagorski, K., Petrovsky, N., Cribbs, D. H., Agadjanyan, et al
  2019; 9 (1): 15455

- **Development of a Chimeric Model to Study and Manipulate Human Microglia In Vivo.** *Neuron*
  Hasselmann, J., Coburn, M. A., England, W., Figueroa Velez, D. X., Kiani Shabestari, S., Tu, C. H., McQuade, A., Kolahdouzan, M., Echeverria, K., Claes, C., Nakayama, T., Azevedo, R., Coufal, et al
  2019; 103 (6): 1016-1033.e10