Stanford

Ian Guldner

Instructor, Neurology and Neurological Sciences

Bio

ACADEMIC APPOINTMENTS

- Instructor, Neurology and Neurological Sciences

Publications

PUBLICATIONS

- **Multi-tissue transcriptomic aging atlas reveals predictive aging biomarkers in the killifish.** *Nature aging*
  Costa, E. K., Chen, J., Guldner, I. H., Mboning, L., Schmahl, N., Tsenter, A., Nagvekar, R., Wu, M. R., Moran-Losada, P., Bouchard, L. S., Wang, S., Singh, P. P., Pellegrini, et al
  2026

- **Ageing promotes microglial accumulation of slow-degrading synaptic proteins.** *Nature*
  Guldner, I. H., Wagner, V. P., Moran-Losada, P., Shi, S. M., Golub, S. W., Hevler, J. F., Chen, K., Meese, B. T., Ghoochani, A., Pulido, E., Oh, H. S., Le Guen, Y., Lu, et al
  2026

- **Biomarkers.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
  Oh, H. S., Urey, D. Y., Karlsson, L., Zhu, Z., Shen, Y., Farinas, A., Timsina, J., Duggan, M. R., Chen, J., Guldner, I. H., Morshed, N., Yang, C., Western, et al
  2025; 21 Suppl 2: e102349

- **Synaptic proteins that aggregate and degrade slower with aging accumulate in microglia.** *bioRxiv : the preprint server for biology*
  Guldner, I. H., Wagner, V. P., Moran-Losada, P., Shi, S. M., Chen, K., Meese, B. T., Oh, H., Le Guen, Y., Lu, N., Wong, P. S., To, N. S., Garceau, D., Guo, et al
  2025

- **A spatio-temporal brain miRNA expression atlas identifies sex-independent age-related microglial driven miR-155-5p increase.** *Nature communications*
  Engel, A., Wagner, V., Hahn, O., Foltz, A. G., Atkins, M., Beganovic, A., Guldner, I. H., Lu, N., Saksena, A., Fischer, U., Ludwig, N., Meese, E., Wyss-Coray, et al
  2025; 16 (1): 4588

- **A cerebrospinal fluid synaptic protein biomarker for prediction of cognitive resilience versus decline in Alzheimer's disease.** *Nature medicine*
  Oh, H. S., Urey, D. Y., Karlsson, L., Zhu, Z., Shen, Y., Farinas, A., Timsina, J., Duggan, M. R., Chen, J., Guldner, I. H., Morshed, N., Yang, C., Western, et al
  2025

- **A spatio-temporal brain miRNA expression atlas identifies sex-independent age-related microglial driven miR-155-5p increase.** *bioRxiv : the preprint server for biology*
  Engel, A., Wagner, V., Hahn, O., Foltz, A. G., Atkins, M., Beganovic, A., Guldner, I. H., Lu, N., Saksena, A., Fischer, U., Ludwig, N., Meese, E., Wyss-Coray, et al
  2025

- **Multi-tissue transcriptomic aging atlas reveals predictive aging biomarkers in the killifish.** *bioRxiv : the preprint server for biology*
  Costa, E. K., Chen, J., Guldner, I. H., Mboning, L., Schmahl, N., Tsenter, A., Wu, M., Moran-Losada, P., Bouchard, L. S., Wang, S., Singh, P. P., Pellegrini, M., Brunet, et al

2025

- **APOE4/4 is linked to damaging lipid droplets in Alzheimer's diseasemicroglia.** *Nature*
  Haney, M. S., Palovics, R., Munson, C. N., Long, C., Johansson, P. K., Yip, O., Dong, W., Rawat, E., West, E., Schlachetzki, J. C., Tsai, A., Guldner, I. H., Lamichhane, et al
  2024

- **Atlas of the aging mouse brain reveals white matter as vulnerable foci.** *Cell*
  Hahn, O., Foltz, A. G., Atkins, M., Kedir, B., Moran-Losada, P., Guldner, I. H., Munson, C., Kern, F., Pálovics, R., Lu, N., Zhang, H., Kaur, A., Hull, et al
  2023

- **A nanotherapeutic approach to selectively eliminate metastatic breast cancer cells by targeting cell surface GRP78.** *Nanoscale*
  Shin, J., Kim, B., Lager, T. W., Mejia, F., Guldner, I., Conner, C., Zhang, S., Panopoulos, A. D., Bilgicer, B.
  2023

- **APOE4/4 is linked to damaging lipid droplets in Alzheimer's microglia.** *bioRxiv : the preprint server for biology*
  Haney, M. S., Pálovics, R., Munson, C. N., Long, C., Johansson, P., Yip, O., Dong, W., Rawat, E., West, E., Schlachetzki, J. C., Tsai, A., Guldner, I. H., Lamichhane, et al
  2023

- **Activated immune cells drive neurodegeneration** *NATURE*
  Guldner, I. H., Wyss-Coray, T.
  2023; 615 (7953): 588-589

- **Activated immune cells drive neurodegeneration in an Alzheimer's model.** *Nature*
  Guldner, I. H., Wyss-Coray, T.
  2023; 615 (7953): 588-589

- **Isolation of mouse brain-infiltrating leukocytes for single cell profiling of epitopes and transcriptomes.** *STAR protocols*
  Guldner, I. H., Golomb, S. M., Wang, Q., Wang, E., Zhang, S.
  2021; 2 (2): 100537

- **Single-cell profiling guided combinatorial immunotherapy for fast-evolving CDK4/6 inhibitor-resistant HER2-positive breast cancer** *NATURE COMMUNICATIONS*
  Wang, Q., Guldner, I. H., Golomb, S. M., Sun, L., Harris, J. A., Lu, X., Zhang, S.
  2019; 10: 3817

- **Death effector domain-containing protein induces vulnerability to cell cycle inhibition in triple-negative breast cancer** *NATURE COMMUNICATIONS*
  Ni, Y., Schmidt, K. R., Werner, B. A., Koenig, J. K., Guldner, I. H., Schnepp, P. M., Tan, X., Jiang, L., Host, M., Sun, L., Howe, E. N., Wu, J., Littlepage, et al
  2019; 10: 2860