Stanford



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Publications

PUBLICATIONS

- **Simultaneous spatial transcriptomics and morphology profiling as tools to explore how microglia change with age.** *Nature aging*
  Henze, D. E., Tsai, A. P., Wyss-Coray, T., Quake, S. R.
  2026

- **Stroke volume analog on a chip - in vitro hydrodynamic model of cardiac pumping efficiency** *LAB ON A CHIP*
  Zimmerman, J. F., MacQueen, L. A., Henze, D., Drennan, D. J., Kim, S. L., Ardona, H. M., Choi, S., Jin, Q., Parker, K.
  2026

- **Spatial and single-cell transcriptomics reveal the reorganization of cerebellar microglia with aging.** *Cell reports*
  Tsai, A. P., Henze, D. E., Ramirez Lopez, E., Haberberger, J., Dong, C., Lu, N., Atkins, M., Costa, E. K., Farinas, A., Oh, H. S., Moran-Losada, P., Le Guen, Y., Isakova, et al
  2025; 44 (12): 116624

- **A Single Nuclear and Spatial Transcriptomic Atlas of the Contractile and Atonic Gravid Human Uterus Reveals Two Distinct Smooth Muscle Cell Populations**
  Ansari, J., Fornes, D., Knutsen, C., Yang, L., Michel, G., Kum, A., Henze, D., Alvira, C., Quake, S., Cornfield, D.
  SPRINGER HEIDELBERG.2025: 60A

- **Spatiotemporal cell junction assembly in human iPSC-CM models of arrhythmogenic cardiomyopathy.** *Stem cell reports*
  Kim, S. L., Trembley, M. A., Lee, K. Y., Choi, S., MacQueen, L. A., Zimmerman, J. F., de Wit, L. H., Shani, K., Henze, D. E., Drennan, D. J., Saifee, S. A., Loh, L. J., Liu, et al
  2023; 18 (9): 1811-1826

- **Fattening chips: hypertrophy, feeding, and fasting of human white adipocytes in vitro.** *Lab on a chip*
  Pope, B. D., Warren, C. R., Dahl, M. O., Pizza, C. V., Henze, D. E., Sinatra, N. R., Gonzalez, G. M., Chang, H., Liu, Q., Glieberman, A. L., Ferrier, J. P., Cowan, C. A., Parker, et al
  2020; 20 (22): 4152-4165