Stanford

Kitra Lily Cates

Postdoctoral Scholar, Genetics

Bio

STANFORD ADVISORS

- Maria Barna, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Isolation of Subcellular Ribosome Subpopulations Based on Recombinant Peptide Tag-Specific Location-Restricted Illumination-Enhanced Biotinylation.** *Journal of visualized experiments : JoVE*
  Xu, A., Cates, K., Kerr, C., Wysong, K., Barna, M.
  2026

- **Ribo-Tweezer: Rapid removal of ribosomal proteins reveals additional layers of post-transcriptional gene regulation.** *Molecular cell*
  Chen, Y., Cheng, C. P., Cates, K., Marinov, G. K., Lantz, T. C., Yang, H., Liu, I., Genuth, N. R., Andronescu, C., Hung, V., Bermudez, A., Rothschild, D., Georgeson, et al
  2026

- **A subcellular map of translational machinery composition and regulation at the single-molecule level.** *Science (New York, N.Y.)*
  Zhang, Z., Xu, A., Bai, Y., Chen, Y., Cates, K., Kerr, C., Bermudez, A., Susanto, T. T., Wysong, K., García Marqués, F. J., Nolan, G. P., Pitteri, S., Barna, et al
  2025; 387 (6738): eadn2623

- **Ribosome-associated proteins: unwRAPping ribosome heterogeneity in the twenty-first century.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Cates, K., Hung, V., Barna, M.
  2025; 380 (1921): 20230378

- **Fate erasure logic of gene networks underlying direct neuronal conversion of somatic cells by microRNAs.** *Cell reports*
  Cates, K., Yuan, L., Yang, Y., Yoo, A. S.
  2025; 44 (1): 115153

- **MICRORNA TARGETING LOGIC IN DIRECT NEURONAL REPROGRAMMING OF GLIOBLASTOMA**
  Yuan, L., Cates, K., Kim, A., Yoo, A.
  OXFORD UNIV PRESS INC.2024

- **Modeling late-onset Alzheimer's disease neuropathology via direct neuronal reprogramming.** *Science (New York, N.Y.)*
  Sun, Z., Kwon, J., Ren, Y., Chen, S., Walker, C. K., Lu, X., Cates, K., Karahan, H., Sviben, S., Fitzpatrick, J. A., Valdez, C., Houlden, H., Karch, et al
  2024; 385 (6708): adl2992

- **Evaluation of an 8-week high school science communication course designed to read, write, and present scientific research** *ADVANCES IN PHYSIOLOGY EDUCATION*
  Radyk, M. D., Spatz, L. B., Adkins-Threats, M. L., Cates, K., St Pierre, C. L.

2023; 47 (4): 910-918

- **Age-related Huntington's disease progression modeled in directly reprogrammed patient-derived striatal neurons highlights impaired autophagy.** *Nature neuroscience*
  Oh, Y. M., Lee, S. W., Kim, W. K., Chen, S., Church, V. A., Cates, K., Li, T., Zhang, B., Dolle, R. E., Dahiya, S., Pak, S. C., Silverman, G. A., Perlmutter, et al
  2022; 25 (11): 1420-1433

- **Generation of Human Neurons by microRNA-Mediated Direct Conversion of Dermal Fibroblasts.** *Methods in molecular biology (Clifton, N.J.)*
  Church, V. A., Cates, K., Capano, L., Aryal, S., Kim, W. K., Yoo, A. S.
  2021; 2239: 77-100

- **Comparison of differential accessibility analysis strategies for ATAC-seq data** *SCIENTIFIC REPORTS*
  Gontarz, P., Fu, S., Xing, X., Liu, S., Miao, B., Bazylianska, V., Sharma, A., Madden, P., Cates, K., Yoo, A., Moszczynska, A., Wang, T., Zhang, et al
  2020; 10 (1): 10150

- **Deconstructing Stepwise Fate Conversion of Human Fibroblasts to Neurons by MicroRNAs.** *Cell stem cell*
  Cates, K. n., McCoy, M. J., Kwon, J. S., Liu, Y. n., Abernathy, D. G., Zhang, B. n., Liu, S. n., Gontarz, P. n., Kim, W. K., Chen, S. n., Kong, W. n., Ho, J. N., Burbach, et al
  2020

- **An activating mutation of interferon regulatory factor 4 (IRF4) in adult T-cell leukemia.** *The Journal of biological chemistry*
  Cherian, M. A., Olson, S., Sundaramoorthi, H., Cates, K., Cheng, X., Harding, J., Martens, A., Challen, G. A., Tyagi, M., Ratner, L., Rauch, D.
  2018; 293 (18): 6844-6858