

Stanford



Kaelan Brennan

Postdoctoral Scholar, Chemical and Systems Biology

Bio

HONORS AND AWARDS

- Propel Postdoctoral Scholars Fellowship, Stanford University, School of Medicine (2025)
- T32 Training Grant in Epithelial Biology, Stanford University, School of Medicine, Department of Dermatology (2025)
- Behrens-Guzman Palma Graduate Student Award, Stowers Institute for Medical Research (2024)
- Ruth L. Kirschstein NRSA for Individual Predoctoral Fellows (F31) Award, Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH (2022-2024)
- Outstanding Senior in Biochemistry, Purdue University, Department of Biochemistry (2017)
- Outstanding Junior in Biochemistry, Purdue University, Department of Biochemistry (2016)
- Outstanding Sophomore in Biochemistry, Purdue University, Department of Biochemistry (2015)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stowers Institute for Medical Research , Genetics & Genomics (2024)
- Embryology, Concepts and Techniques in Modern Developmental Biology, Marine Biological Laboratory (2023)
- Bachelor of Science, Purdue University , Biochemistry (2017)

STANFORD ADVISORS

- Joanna Wysocka, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Widespread low-affinity motifs enhance chromatin accessibility and regulatory potential in mESCs** *bioRxiv*
Weilert, M., Brennan, K. J., Dalal, K., Krueger, S., Jiang, H., Martinez-Corral, R., Zeitlinger, J.
2025
- **Lola-I is a promoter pioneer factor that establishes de novo Pol II pausing during development.** *Nature communications*
Ramalingam, V., Yu, X., Slaughter, B. D., Unruh, J. R., Brennan, K. J., Onyshchenko, A., Lange, J. J., Natarajan, M., Buck, M., Zeitlinger, J.
2023; 14 (1): 5862
- **Chromatin accessibility in the Drosophila embryo is determined by transcription factor pioneering and enhancer activation.** *Developmental cell*
Brennan, K. J., Weilert, M., Krueger, S., Pampari, A., Liu, H. Y., Yang, A. W., Morrison, J. A., Hughes, T. R., Rushlow, C. A., Kundaje, A., Zeitlinger, J.
2023
- **Transcriptome profiling of aging Drosophila photoreceptors reveals gene expression trends that correlate with visual senescence.** *BMC genomics*

Hall, H., Medina, P., Cooper, D. A., Escobedo, S. E., Rounds, J., Brennan, K. J., Vincent, C., Miura, P., Doerge, R., Weake, V. M.
2017; 18 (1): 894

- **Transcriptome Profiling Identifies Multiplexin as a Target of SAGA Deubiquitinase Activity in Glia Required for Precise Axon Guidance During *Drosophila* Visual Development.** *G3 (Bethesda, Md.)*

Ma, J., Brennan, K. J., D'Aloia, M. R., Pascuzzi, P. E., Weake, V. M.
2016; 6 (8): 2435-45