Stanford

Anthony Harris

Postdoctoral Scholar, Genetics

Bio

BIO

Anthony Harris is a postdoctoral fellow in the Department of Genetics at Stanford School of Medicine, where he investigates the organization and function of the genome during cellular development. His research focuses on uncovering fundamental principles of chromosome structure, cellular differentiation, and genome stability. By combining experimental molecular biology, computational modeling, and third generation sequencing technologies, Dr. Harris aims to elucidate the mechanisms that shape chromatin architecture and direct genome maintenance. His interdisciplinary approach integrates cutting-edge quantitative analysis with traditional molecular techniques to advance understanding of the relationship between cellular organization and disease.

Dr. Harris has developed computational tools for genomic data analysis and applies data-driven strategies to study chromatin structure and gene regulation. His work has been published in leading journals, including EMBO Journal, Genetics, and Developmental Cell, with projects spanning meiosis regulation, transcriptional control, and genome integrity. These experiences reflect his commitment to understanding how chromatin organization and gene expression guide cell fate and function.

Dr. Harris earned his Bachelor of Science in Biochemistry from the University of Minnesota and his Ph.D. in Molecular and Cellular Biology from the University of California, Berkeley. He brings expertise in data analysis, computational biology, scientific writing, and collaborative research. His broad training spans biochemistry, cell biology, microbiology, genetics, and computational genomics.

HONORS AND AWARDS

- Postdoctoral Diversity Enrichment Program, Burroughs Wellcome Fund (2025-Current)
- Propel Postdoctoral Scholars Fellowship, Stanford University (2024-Current)
- Graduate Research Fellowship, National Science Foundation (NSF) (2017-2022)
- Chancellor’s Fellowship, University of California, Berkeley (2016-2018)
- Outstanding Student Employee Award, University of Minnesota, Twin Cities (2013)

PROFESSIONAL EDUCATION

- Bachelor of Science, University of Minnesota Twin Cities (2014)
- Doctor of Science, University of California Berkeley (2023)
- Associate of Arts, Metropolitan State University (2012)
- Doctor of Philosophy, University of California, Berkeley , Molecular and Cell Biology (2023)

- Bachelor of Science, University of Minnesota, Twin Cities , Biochemistry (2014)

STANFORD ADVISORS

- Nicolas Altemose, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Multi-signal regulation of the GSK-3β homolog Rim11 controls meiosis entry in budding yeast.** *The EMBO journal*
  Kociemba, J., Jørgensen, A. C., Tadić, N., Harris, A., Sideri, T., Chan, W. Y., Ibrahim, F., Ünal, E., Skehel, M., Shahrezaei, V., Argüello-Miranda, O., van Werven, F. J.
  2024; 43 (15): 3256-3286

- **The transcriptional regulator Ume6 is a major driver of early gene expression during gametogenesis.** *Genetics*
  Harris, A., Ünal, E.
  2023; 225 (2)

- **Meiotic Cells Counteract Programmed Retrotransposon Activation via RNA-Binding Translational Repressor Assemblies.** *Developmental cell*
  Laureau, R., Dyatel, A., Dursuk, G., Brown, S., Adeoye, H., Yue, J. X., De Chiara, M., Harris, A., Ünal, E., Liti, G., Adams, I. R., Berchowitz, L. E.
  2021; 56 (1): 22-35.e7

- **Comparison of sequencing the D2 region of the large subunit ribosomal RNA gene (MicroSEQ®) versus the internal transcribed spacer (ITS) regions using two public databases for identification of common and uncommon clinically relevant fungal species.** *Journal of microbiological methods*
  Arbefeville, S., Harris, A., Ferrieri, P.
  2017; 140: 40-46

- **Immunolocalization on Whole Anther Chromosome Spreads for Male Meiosis.** *Methods in molecular biology (Clifton, N.J.)*
  Dukowic-Schulze, S., Harris, A., Chen, C.
  2016; 1429: 161-75

- **Pasteurella multocida Bacteremia With Associated Knee Arthroplasty Infection in an 80-Year-Old Caucasian Man.** *Laboratory medicine*
  Arbefeville, S., Harris, A., Dittes, S., Ferrieri, P.
  2016; 47 (3): 241-5

- **Comparative transcriptomics of early meiosis in Arabidopsis and maize.** *Journal of genetics and genomics = Yi chuan xue bao*
  Dukowic-Schulze, S., Harris, A., Li, J., Sundararajan, A., Mudge, J., Retzel, E. F., Pawlowski, W. P., Chen, C.
  2014; 41 (3): 139-52