

Dr. Rayna M. Harris

Scientist, Educator, Community Engagement Manager

Education

- 2012 - 2017 Ph.D. Cell and Molecular Biology. The University of Texas at Austin
- 2002 - 2006 B.S. Biochemistry. The University of Texas at Austin

Experience

- 2023 Adjunct Faculty. Lake Tahoe Community College
- 2021 - 2023 Postdoctoral Scholar. University of California, Davis
- 2020 - 2022 Parking Supervisor. Alpine Meadows Ski Resort
- 2020 - 2021 Nursery Supervisor. Rock & Rose Nursery & Landscaping
- 2018 - 2020 Postdoctoral Scholar. University of California, Davis
- 2010 - 2012 Laboratory Manager. The University of Texas at Austin
- 2007 - 2010 Teaching Specialist. The University of Texas at Austin

Honors and Awards

- 2019 AAAS Community Engagement Fellowship.
- 2019 rstudio::conf 2019 Diversity Scholarship.
- 2017 Outstanding Graduate Student Academic Employee Award.
- 2016, 17 University Graduate Continuing Fellowship.
- 2014, 15, 16 Academic Enrichment Fund Award.

Teaching Experience

- Spring 2023 Organic Chemistry III Lab (CHM 223L). Lake Tahoe Community College
- Spring 2023 Cell and Molecular Biology (BIO 110). Lake Tahoe Community College
- Winter 2023 Principles of Biology III (BIO 103). Lake Tahoe Community College
- 2022 Introduction to R. University of California, Davis
- 2022 Introduction to Cloud Computing. University of California, Davis
- 2022 Introduction to UNIX for Cloud Computing. University of California, Davis
- 2016 - 2019 Instructor Training. The Carpentries
- 2017 Biostatistics (SDS 328M). The University of Texas at Austin
- 2013 Problems in Modern Biology (BIO 301E). The University of Texas at Austin
- 2007 - 2010 Organic Chemistry Laboratory (CH 210C). The University of Texas at Austin
- 2008 - 2009 Introduction to Spanish. Futura Language Professionals

Selected Publications

Available at https://scholar.google.com/citations?user=_bVy9pMAAAAJ&hl=en

- 2022 A Parigi, MC Lim, S Canchi, J Sanchez, J Walter, RM Harris, et al., A virtual training module for introducing the use of Amazon Web Services. *Journal of Open Source Education* 5 (54), 167
- 2020 A Nederbragt, RM Harris, AP Hill, G Wilson, Ten quick tips for teaching with participatory live coding. *PLoS Computational Biology* 16 (9), e1008090
- 2019 RM Harris, HY Kao, JM Alarcon, HA Hofmann, A Fenton, Hippocampal transcriptomic responses to enzyme-mediated cellular dissociation. *Hippocampus* 153585
- 2018 GA Devenyi, R Emonet, RM Harris, KL Hertweck, D Irving, I Milligan, et al., Ten simple rules for collaborative lesson development. *PLOS Computational Biology* 14 (3), e1005963
- 2017 PD Dijkstra, SM Maguire, RM Harris, AA Rodriguez, RS DeAngelis, et al., The melanocortin system regulates body pigmentation and social behaviour in a colour polymorphic cichlid fish. *Proceedings of the Royal Society B: Biological Sciences* 284 (1851), 20162838
- 2016 RM Harris, LA O'Connell, HA Hofmann, Brain Evolution, Development, and Plasticity. *The Wiley Handbook of Evolutionary Neuroscience* 422
- 2015 JM Simões, EN Barata, RM Harris, LA O'Connell, HA Hofmann, et al., Social odors conveying dominance and reproductive information induce rapid physiological and neuromolecular changes in a cichlid fish. *BMC genomics* 16 (1), 1-13
- 2015 RM Harris, HA Hofmann, Seeing is believing: Dynamic evolution of gene families. *Proceedings of the National Academy of Sciences* 112 (5), 1252-1253
- 2015 RG Oldfield, RM Harris, HA Hofmann, Integrating resource defence theory with a neural nonapeptide pathway to explain territory-based mating systems. *Frontiers in Zoology* 12 (S1), 1-16
- 2014 D Brawand, CE Wagner, YI Li, M Malinsky, I Keller, S Fan, O Simakov, et al., The genomic substrate for adaptive radiation in African cichlid fish. *Nature* 513 (7518), 375–381
- 2014 RM Harris, HA Hofmann, Neurogenomics of Behavioral Plasticity. *Advances in Experimental Medicine and Biology* 781, 149-168
- 2014 RM Harris, PD Dijkstra, HA Hofmann, Complex Structural and Regulatory Evolution of the Pro-Opiomelanocortin Gene Family. *General and Comparative Endocrinology* 195, 107-115
- 2013 RG Oldfield, RM Harris, DA Hendrickson, HA Hofmann, Arginine Vasotocin and Androgen Pathways are Associated with Mating System Variation in North American Cichlid Fishes. *Hormones and Behavior* 64, 44-52

Selected Presentations

Available at <https://speakerdeck.com/raynamharris>.

- 2020 Shiny Musical Genes. University of California, Davis
- 2020 A journey in 'omics research from the bottom of the ocean to the top of a mountain. Sacramento State University
- 2020 Peaks and valleys of prolactin-driven gene expression in parental care. University of California, Davis
- 2019 Community-driven efforts to translate educational materials into many languages. FORCE 11 Annual Meeting
- 2019 RNAseq: A five course meal. University of California, Davis
- 2019 Managing Multilingual Communities. rOpenSci Community Call
- 2018 Usando y Enseñando R para Investigación Reproducible. R Ladies Buenos Aires
- 2018 Zombie Brains: Microbial Mind Control. Nerd Nite Austin

Service

- 2019 Coordinator. I Can Science, a National Geographic Video Series
- 2018 - 2019 Spanish Translator. The Carpentries
- 2017 - 2018 Secretary. Software Carpentry Steering Committee
- 2016 - 2017 Poster Judge. College of Natural Science Undergraduate Research Forum
- 2012 - 2017 Coordinator. Annual Big Data in Biology Symposium
- 2014 - 2016 Coordinator. Summer School for Big Data in Biology
- 2014 Coordinator. Transdisciplinary Graduate Student Luncheon
- 2009 Spanish Translator. INBio Park, Costa Rica
- Peer-reviewer. AAS Open Research; Behavioral Ecology; Genes, Genomes & Genetics; Genes, Brains & Behavior; Journal of Experimental Zoology Part A; Nature; Physiology & Behavior; Proceedings of the Royal Society B; rOpenSci