

# Dr. Rayna M. Harris

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*Postdoctoral Scholar, University of California, Davis*

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## 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

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## Experience

- 2021 - 2022 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

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## 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.  
2016 Society for Integrative and Comparative Biology Grant in Aid of Research.  
2014, 15, 16 Academic Enrichment Fund Award.

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## Publications

*From Google Scholar* [https://scholar.google.com/citations?user=\\_bVy9pMAAAAJ&hl](https://scholar.google.com/citations?user=_bVy9pMAAAAJ&hl)

- 2022 VS Farrar, RM Harris, SH Austin, BMN Ultreras, AM Booth, F Angelier, et al., Prolactin and prolactin receptor expression in the HPG axis and crop during parental care in both sexes of a biparental bird (*Columba livia*). *General and comparative endocrinology* 315, 113940 Citations: 2  
2021 SH Austin, JS Krause, R Viernes, VS Farrar, AM Booth, RM Harris, et al., Uncovering the Sex-specific Endocrine Responses to Reproduction and Parental Care. *Frontiers in endocrinology* 12 Citations: 1  
2021 AL Charbonneau, A Brady, CT Brown, SA Sansone, A Ma'ayan, et al., Making Common Fund data more findable: Catalyzing a Data Ecosystem. *bioRxiv* 2021 (11), <https://doi.org/10.1101/2021.11.05>. Citations: 0

- 2020 A Nederbragt, RM Harris, AP Hill, G Wilson, Ten quick tips for teaching with participatory live coding. *PLoS Computational Biology* 16 (9), e1008090 Citations: 7
- 2020 AS Lang, SH Austin, RM Harris, RM Calisi, MD MacManes, Stress-mediated convergence of splicing landscapes in male and female Rock Doves. *BMC genomics* 21 (1), 1-18 Citations: 3
- 2020 RM Harris, HY Kao, JM Alarcón, AA Fenton, HA Hofmann, Transcriptome analysis of hippocampal subfields identifies gene expression profiles associated with long-term active place avoidance memory. *BioRxiv* Citations: 2
- 2019 DJB Clarke, L Wang, A Jones, ML Wojciechowicz, D Torre, KM Jagodnik, et al., FAIRshake: Toolkit to Evaluate the FAIRness of Research Digital Resources. *Cell systems* 9 (5), 417-421 Citations: 23
- 2019 AJ Northcutt, DR Kick, AG Otopalik, BM Goetz, RM Harris, JM Santin, et al., Molecular profiling of single neurons of known identity in two ganglia from the crab *Cancer borealis*. *Proceedings of the National Academy of Sciences* 116 (52), 26980-26990 Citations: 19
- 2019 DJB Clarke, L Wang, A Jones, ML Wojciechowicz, D Torre, KM Jagodnik, et al., FAIRshake: toolkit to evaluate the findability, accessibility, interoperability, and reusability of research digital resources. *BioRxiv* 657676 Citations: 9
- 2019 RM Harris, HY Kao, JM Alarcon, HA Hofmann, A Fenton, Hippocampal transcriptomic responses to enzyme-mediated cellular dissociation. *Hippocampus* 153585 Citations: 6
- 2019 AJ Northcutt, DR Kick, AG Otopalik, BM Goetz, RM Harris, JM Santin, et al., Molecular Profiling to Infer Neuronal Cell Identity: Lessons from small ganglia of the Crab *Cancer borealis*. *bioRxiv* 690388 Citations: 2
- 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 Citations: 18
- 2018 SCP Renn, HE Machado, N Duftner, AK Sessa, RM Harris, HA Hofmann, Gene expression signatures of mating system evolution. *Genome* 61 (4), 287-297 Citations: 13
- 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 Citations: 42
- 2017 RM Harris, AG Otopalik, CJ Smith, D Bucher, J Golowasch, HA Hofmann, Single-Neuron Gene Expression Analysis Using the Maxwell 16 LEV System in the Neural Systems and Behavior Course. *bioRxiv* 107342 Citations: 1
- 2016 C Göppert, RM Harris, A Theis, A Boila, S Hohl, A Rüegg, HA Hofmann, et al., Inhibition of Aromatase Induces Partial Sex Change in a Cichlid Fish: Distinct Functions for Sex Steroids in Brains and Gonads. *Sexual Development* 10 (2), 97-110 Citations: 29

- 2016 RM Harris, LA O'Connell, HA Hofmann, Brain Evolution, Development, and Plasticity. The Wiley Handbook of Evolutionary Neuroscience 422 Citations: 4
- 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 Citations: 27
- 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 Citations: 23
- 2015 RM Harris, HA Hofmann, Seeing is believing: Dynamic evolution of gene families. Proceedings of the National Academy of Sciences 112 (5), 1252-1253 Citations: 22
- 2015 CC Smith, RM Harris, KP Lampert, M Scharl, HA Hofmann, MJ Ryan, Copy number variation in the melanocortin 4 receptor gene and alternative reproductive tactics the swordtail *Xiphophorus multilineatus*. Environmental Biology of Fishes 98 (1), 23-33 Citations: 18
- 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 Citations: 828
- 2014 EK Fischer, RM Harris, HA Hofmann, KL Hoke, Predator exposure alters stress physiology in guppies across timescales. Hormones and Behavior 65 (2), 165-172 Citations: 63
- 2014 RM Harris, HA Hofmann, Neurogenomics of Behavioral Plasticity. Advances in Experimental Medicine and Biology 781, 149-168 Citations: 43
- 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 Citations: 39
- 2014 KA Stiver, RM Harris, JP Townsend, HA Hofmann, SH Alonzo, Neural Gene Expression Profiles and Androgen Levels Underlie Alternative Reproductive Tactics in the Ocellated Wrasse, *Symphodus ocellatus*. Ethology 121 (2), 152-167 Citations: 26
- 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 Citations: 26
- 2013 AK Sessa, RM Harris, HA Hofmann, Sex Steroid Hormones Modulate Responses to Social Challenge and Opportunity in Males of the Monogamous Convict Cichlid, *Amatitlana nigrofasciata*. General and Comparative Endocrinology 189, 59-65 Citations: 23

## --- R Packages

- 2022 datos: Traduce al Español Varios Conjuntos de Datos de Práctica. 1924 downloads last month

## Selected Presentations

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

- 2020 Shiny Musical Genes. UC Davis
- 2020 A journey in 'omics research from the bottom of the ocean to the top of a mountain. Sacramento State University
- 2020 Life lessons and scientific insight from methods-, hypothesis-, and data-driven research. UC Davis
- 2020 Peaks and valleys of prolactin-driven gene expression during parental care. UC Davis
- 2019 Community-driven efforts to translate educational materials into many languages. FORCE 11 Annual Meeting
- 2019 RNAseq: A five course meal. UC Davis
- 2019 Managing Multilingual Communities. rOpenSci Community Call
- 2019 Networking strategies. AAAS Center for Scientific Collaboration and Community Engagement
- 2018 The Carpentries Instructor Training. LatinR Annual Conference
- 2018 Usando y Enseñando R para Investigación Reproducible. R Ladies Buenos Aires
- 2018 Zombie Brains: Microbial Mind Control. Nerd Nite Austin
- 2017 Transcriptional plasticity in the hippocampus and its role in avoidance learning. UT Austin