

NATALIA RIVERA-RINCÓN

Postdoctoral fellow, University of California Riverside, Riverside, CA. (2025 to present)

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UNIVERSITY EDUCATION

- 2025 Ph.D., Biological Sciences, Auburn University. Auburn, AL. United States.
- 2024 Graduate Certificate, Computational Biology, DBS, Auburn University. Auburn, AL. United States.
- 2016 Biologist, Program of Biology, Faculty of Basic Sciences and Technologies, Universidad del Quindío, Colombia (**Academic average: 4.0**)

ADDITIONAL EDUCATION

- 2022 Data analysis and deep learning strategies for image-based profiling in cell biology workshop, CytoData. Allen Institute for Cell Science, Seattle, Washington.
- 2020 Population genomic data analysis course/workshop, CONGEN. University of Montana, online.
- 2017 Diploma in University Teaching. Universidad del Quindío, Colombia
- 2017 Program of bioinformatics software and computational approaches in modern biology. UC San Diego, California.
- 2013 II Course phylogenetic and population genetics, Universidad del Quindío, Armenia-Quindío.
- 2015 IV Latin American School of Evolution, Armenia, Quindío.

PUBLISHING

- Rivera-Rincón, N.**, Altindag, U. H., Amin, R., Graze, R. M., Appel, A. G., & Stevison, L. S. A comparison of thermal stress response between *Drosophila melanogaster* and *Drosophila pseudoobscura* reveals differences between species and sexes. *Journal of insect physiology*, 153, 2024. doi:10.1016/j.jinsphys.2024.104616
- Galvis-Aparicio M.A., **Rivera-Rincón N.**, Castañeda-Bonilla R.N., & Pérez-Gonzalez J.L. *Atelopus nahumae* (Ruíz-Carranza, Ardila-Robayo y Hernández-Camacho, 1994). Catalog of Amphibians and Reptiles of Colombia. 5 (2): 1-7, 2020.

CONGRESS, SYMPOSIUMS, AND SEMINARS.

- 2024 Oral presentation. **N Rivera-Rincón**, SA Koury, E Saurette, and LS Stevison. “Interactive effects of hypoxia and low temperature on recombination rate plasticity”. Evolution Conference. Montreal, QC, Canada.
- 2024 Poster Presentation. **N Rivera-Rincón**, **A May**, E Saurette, and LS Stevison. “Physiological Response of DGRP lines to hypoxia and cold stress”. Auburn Student Research Symposium, Auburn, AL.
- 2024 Poster Presentation. **N Rivera-Rincón**, **A May**, E Saurette, and LS Stevison. “Physiological Response of DGRP lines to hypoxia and cold stress”. The Allied Genetics Conference. Washington, DC.
- 2024 Oral presentation. **LS Stevison**, **N Rivera-Rincón**, SA Koury, and TE Novak. “Recombination rate plasticity depends not only on environmental stressors, but also genomic context and genetic background”. The Allied Genetics Conference. Washington, DC.
- 2023 Poster Presentation. **E Saurette**, TE Novak, **N Rivera-Rincon**, UH Altindag, C Schneider, C Barnette, and LS Stevison. “The impact of caloric density on recombination and reproduction”. Southeastern Population Ecology and Evolutionary Genetics Conference. Mountain Lake, VA.
- 2023 Poster Presentation. TE Novak, **N Rivera-Rincon**, UH Altindag, C Schneider, C Barnette, and **LS Stevison**. “The impact of caloric density on recombination rates in *Drosophila melanogaster*”. Gordon Research Conference: Ecological and Evolutionary Genomics. Smithfield, RI.
- 2023 Oral Presentation. **UH Altindag**, M Watkins, **N Rivera-Rincon**, and LS Stevison. “Regulation of crossover frequency and distribution in response to heat stress”. Evolution conference. Albuquerque, NM.
- 2023 Oral Presentation. **N Rivera-Rincon**, TE Novak, UH Altindag, C Barnette, and LS Stevison. “Effects of caloric density on recombination rates in *Drosophila melanogaster*”. Evolution Conference. Albuquerque, NM.

- 2023 Poster Presentation. **N Rivera-Rincon**, UH Altindag, R Amin, B Stanley, RM Graze, and LS Stevison. “Physiological response to temperature stress in *Drosophila melanogaster* and *D. pseudoobscura*”. 64th Annual Drosophila Research Conference. Chicago, IL.
- 2022 Poster Presentation. **UH Altindag**, M Watkins, N Rivera-Rincon, and LS Stevison. “Regulation of crossover numbers in response to heat stress”. Gordon Research Conference: Meiosis. New London, NH.
- 2022 Assistant. Data analysis and deep learning strategies for image-based profiling in cell biology, CytoData. Allen Institute for Cell Science, Seattle, Washington.
- 2022 Oral Presentation. **N Rivera-Rincon**, UH Altindag, R Amin, B Stanley, RM Graze, and LS Stevison. “Physiological response to temperature stress in *Drosophila melanogaster* and *D. pseudoobscura*”. Evolution Conference. Cleveland, OH.
- 2022 Poster Presentation. **LS Stevison**, UH Altindag, M Watkins, N Rivera-Rincon. “Genome-wide recombination rate plasticity in response to heat stress in *Drosophila pseudoobscura*”. PEQG Meeting. Pacifica, CA.
- 2020 Poster Presentation. **N Rivera-Rincon** and Stevison LS. “Changes in frequency of polymorphic inversions on natural populations of *Drosophila robusta*”. Southeastern Population Ecology and Evolutionary Genetics. Virtual Conference.
- 2015 Oral presentation. **N Rivera-Rincon**, VH Garcia-Merchan. “Comparative analysis of assignment and allocation in 19 Tai populations”. V Colombian Symposium of Evolutionary Biology, Armenia.
- 2014 Poster presentation. **N Rivera-Rincon**, K Chacon-Vargas, DA Acosta, J Gómez-Marín. “Evaluation of partials regions of ITS 1 and 2 as barcoding markers in *Toxoplasma gondii*”. XIII International Congress of Parasitology, México, D.F.
- 2014 Oral presentation. N Rivera-Rincon, K Chacon-Vargas, **DA Acosta**, J Gómez-Marín. “Evaluation of partials regions of ITS 1 and 2 as barcoding markers in *Toxoplasma gondii*”. XLII National Congress of Biological Sciences (ACCB), Barranquilla, Colombia.
- 2014 Oral presentation. **N Rivera-Rincon**, K Chacon-Vargas, DA Acosta, J Gómez-Marín. “Diversity of *Toxoplasma gondii* associated with felines: host-parasite relationship”. X Latin American Congress of Students of Biological Sciences. Universidad del Quindío, Armenia-Quindío-Colombia.
- 2014 Oral presentation. **N Rivera-Rincon**, K Chacon-Vargas, DA Acosta, J Gómez-Marín. “Evaluation of partials regions of ITS 1 and 2 as barcoding markers in *Toxoplasma gondii*”. III Biology – Paisaje Cultural Cafetero Regional Symposium. Universidad del Quindío, Armenia-Quindío-Colombia.
- 2012 Assistant. II Genetics Regional Symposium. Universidad del Quindío, Armenia-Quindío-Colombia.
- 2010 Assistant. I Genetics Regional Symposium. Universidad del Quindío, Armenia-Quindío-Colombia.

TEACHING EXPERIENCE

- 2019-2022 Teaching assistant. Introduction to biology, Laboratory. Department of Biological Sciences, Auburn University, Auburn, AL.
- 2019-2022 Teaching assistant. Introduction to Biology, Laboratory. Department of Biological Sciences, Auburn University, Auburn, AL.
- 2019-2022 Teaching assistant. Principles of Biology, Laboratory. Department of Biological Sciences, Auburn University, Auburn, AL.
- 2019-2022 Teaching assistant. A survey of life, Laboratory. Department of Biological Sciences, Auburn University, Auburn, AL.
- 2016 Research assistant. Genetics (6th semester) Program of Biology, Faculty of Basic Sciences and Technologies, Universidad del Quindío, Armenia, Colombia.
- 2014 Research assistant. Genetics (6th semester) Program of Biology, Faculty of Basic Sciences and Technologies, Universidad del Quindío, Armenia, Colombia.

AWARDS/GRANTS

- 2016 Academic Scholarship, UC San Diego – California.
- 2016 “MERITORIUS WORK”, average: 5.0 - Programa de Biología, Universidad del Quindío
- 2015 Grant “Botas al Campo”. Colombian Association of Herpetology (ACH). Medellín, Antioquia.
- 2010 Academic scholarship. Universidad del Quindío. Armenia, Quindío.
- 2009 Best project of science and technology. INEM “José Celestino Mutis”. Armenia, Quindío.
- 2009 Best ICFES. INEM “José Celestino Mutis”. Armenia, Quindío.

ACADEMIC/PROFESSIONAL SERVICE

Conferences	Symposium organizer, V Colombian Symposium of Evolutionary Biology, Armenia-Colombia (2015).
	Symposium organizer, II Genetics Regional Symposium, Armenia-Colombia (2012).
Editor	Magazine editor and organizer, “1, 2, 3, Ciencia!”. Regional Scientific divulgation magazine, Armenia-Colombia.
Judge	Senior Judge, Category 200, Behavioral and Social Sciences, GEARSEF (<i>Greater East Alabama Regional Science and Engineering Fair</i>) at Auburn University (2021).
	Committee member, 2024 DBS graduate students award. Auburn University (2024).

OUTREACH/SOCIAL SERVICE

Volunteering	Dog walker and cleaning services volunteer at Lee County Humane Society (2022-Present). Foster parent dog at Lee County Society (2021-Present).
Conferences	Colombian group meeting organizer, Evolution Conference 2023. Colombian group meeting organizer, Evolution Conference 2022.
Social outreach	COSAM International students Thanksgiving dinner organizer 2020-2022.

MENTORING EXPERIENCE

Undergraduate Students	Auburn University: 16 Total; 6 in BIOL 4980 Research Credit; 1 as REU and 1 as Undergraduate Research Fellow.
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RESEARCH EXPERIENCE

2019-2024	Research associate. Project “Genome-wide recombination rate plasticity in response to heat stress in <i>Drosophila pseudoobscura</i> ”. Auburn University, NIH. Researchers: LS Stevison, UH Altindag, M Watkins, N Rivera-Rincon .
2016-2019	Research associate. Project "Analysis of the distribution of mammals Caribbean Colombia: Biodiversity Scenarios as tools of regional planning." Oregon State University, ProCAT Colombia, Sierra to Sea Institute, Colciencias, Fulbright Colombia. Researchers: DC Zárrate, JF Gonzalez Maya and N Rivera-Rincón .
2015-2016	Research associate. Project "Evaluation of ecological integrity" tool for analyzing effectiveness in the long term in areas of the National Park System of Colombia. WWF - Colombia. National Parks of Colombia. Humboldt Institute. Researchers: DC Zárrate, JF Gonzalez Maya and N Rivera-Rincón .
2015	Research internship. DNA Barcoding project anurous of Caqueta. Genetics laboratory. University of the Andes. Researchers: AJ Crawford and N Rivera-Rincón .
2015	Research internship. Project "Evaluation of ecological integrity" tool for analyzing effectiveness in the long term in areas of the National Park System of Colombia. WWF - Colombia. National Parks of Colombia. Humboldt Institute. Researchers: DC Zárrate, JF Gonzalez Maya and N Rivera-Rincón .
2014	Herpetologist associated. Strategic plan for ecological restoration in high-Andean forest, Conservation Area Water Star, Vereda Cocora, Salento Quindio.
2014	Herpetologist associated. Management Plan Reserve Castilletes, Tayrona National Park (2015-2034).
2014	Field assistant. Thesis: Phenotypic characteristics determinants of success in male mating glass frog red dots <i>Nymphargus grandisonae</i> (Anura: Centrolenidae). Principal investigator: CS Molina-Guevara.
2014	Research associate. Genotyping of Latin American Strains of <i>Toxoplasma gondii</i> project. "GEPAMOL" Molecular Parasitology Study Group. Center for Biomedical Research. Universidad del Quindio. Investigators: JE Gomez-Marin, N Rivera-Rincón , A Acosta Davila, and K Vargas-Chacon.