Jhan C. Salazar

Data Scientist

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Education

2019 – Present | **School of Medicine, Washington University in St. Louis**
PhD in Ecology and Evolutionary Biology (Expected graduation May, 2025)

2013 – 2018 | **Universidad Icesi, Cali, Colombia**
BS in Biology/Conservation Biology with honor thesis

Experience

2019 - Present | **PhD Candidate – Washington University in St. Louis**

- My research investigates how mountains influence lizard species' evolution in the Colombian Andes, focusing on adaptation across elevations. Using large datasets and statistical approaches, I explore the predictability of phenotypic and genomic variants in complex physiological traits.

2023 | **Research Data Support Specialist II; School of Information – The University of Arizona**

- I designed and summarized machine learning approaches to be easily to understand and apply to biological research.

2018 - 2019 | **Research assistant; Departamento de Ciencias Biológicas; Universidad Icesi**

- I designed and executed a cost-efficient DNA extraction and amplification method for dry forest plants roots in Colombia to generate genetic sequence data symbiotic fungi.

Oral presentations

2023

- Public presentation at the IMSD retreat at Washington University in St. Louis 2023 - "Ain't no mountain high enough: Repeated evolution of high elevation specialization in tropical lizards".
- Public presentation at the Ernst Mayr Symposium at Evolution Conference 2023 - "Ain't no mountain high enough: Repeated evolution of high elevation specialization in tropical lizards".
- Public presentation at the LEC seminar series - "Once upon a time in Colombia: Evolution and ecology of thermal physiology in the Andes".

2022

- Invited speaker at University of South Florida for the Integrative Biology Seminar series - "Exploring the ecology and evolution of the thermal physiology in the tropics".
- Pasado, presente y futuro: Fisiología térmica en los Andes. Universidad Icesi. (Delivered in Spanish).

2018

- Institute of Biology Lunch Talk at VirginiaTech. Intra and interspecific variation in Critical Thermal Minimum and Maximum of mainland anole lizards (Reptilia: Squamata: Dactyloidae: Anolis) (Undergrad thesis)

Media coverage

2023
- "Jhan Salazar on The Wonder of Nature and Importance of Representation" By Frank Harris, British Ecological Society Journals – Black History Month 2023 (in Spotify).
- "Life Can't Get Much Hotter Than This" By Katherine J. Wu, The Atlantic – Science.

2020
- "Jhan Salazar: Journeys of an Afro-Colombian Ecologist" By Dr. Anna Doty, Functional Ecologists - A Blog for the People Behind the Research.
- "Temperaturas Críticas" By Dr. Carlos Guarnizo, Ciencia Café Pa' Sumercé (Delivered in Spanish).
- "For This Colombian Scientist, Lizards Led to A Life of Science!" By Andrew Wight, Forbes.

2019
- "EEPB graduate student wins Afro-Colombian of the year award in the Youth category" By Marta Wegorzewska, WashU News.

Skills

Programming languages: R (advance), Python (beginner)
Statistics: Linear models, classical statistics (e.g., t-tests, ANOVAs), maximum likelihood estimation, Bayesian inference.
Machine Learning: Decision trees, cross-validation, random forest, K-nearest neighbor, K-means clustering.
Language: English (proficient) and Spanish (native).

Highlighted Publications (full list at `https://scholar.google.es/citations?user=tPYzRYIAAAAJ&hl=en`)

2023 1. Jacobs, J. A., **Salazar, J. C.** & Winchell, K. M. A picture is worth a thousand dollars: a photographic approach to studying colour in anoles. *Biological Journal of the Linnean Society* **blad143,** 1–12 (2023).

2022 2. **Salazar, J. C.** & Londoño, G. A. Nesting biology of the Golden-Winged Manakin (Masius chrysopterus), with a review of nesting traits for lowland and highland species of Pipridae. *Neotropical Ornithology* **33,** 58–65 (2022).

2019 3. **Salazar, J. C.**, del Rosario Castañeda, M., Londoño, G. A., Bodensteiner, B. L. & Muñoz, M. M. Physiological evolution during adaptive radiation: A test of the island effect in Anolis lizards. *Evolution* **73,** 1241–1252 (2019).

Workshops

2017
- Advance Comparative Phylogenetic Methods in R. Dr. Liam J. Revell (University of Massachusetts Boston). At Universidad del Valle.

2016
- Comparative Phylogenetic Methods in R. Dr. Julie M. Allen (University of Nevada, Reno). At Universidad Icesi.

2015
- Basics in R. Dr. Julie M. Allen (University of Illinois). At Universidad Icesi.

Highlighted Awards

1. Third place at best Oral Presentation at the IMSD retreat (2023; WashU)
2. Afro-Colombian of the Year – Youth Category (2019; El Espectador)
3. Undergrad Icesos Scholarship (2013; Full ride - Universidad Icesi)