

WILMER S AMAYA-MEJIA

621 CHARLES E. YOUNG DRIVE, SOUTH

LOS ANGELES, CA. 90095

(571) 285-6658

AMAYAMEJIAWS@GMAIL.COM

<https://amaya-mejia.com/>

EDUCATION

2020 – Present

University of California, Los Angeles

Doctor of Science in Biology

Co-Advisors: Pamela Yeh PhD, Ravinder Sehgal PhD

Advancement to Candidacy: May 31th, 2023

2018 - 2020

San Francisco State University

Master of Science in Biology

Advisor: Ravinder Sehgal PhD

Thesis: “Phylogenetic analysis of avian haemosporidian parasites across islands of Milne Bay Province, Papua New Guinea.”

2012 – 15

Virginia Commonwealth University

Bachelor of Science in Biology

PUBLICATIONS

Amaya-Mejia, W., Ma, L., Freimuth S., Sehgal, R.N.M., Yeh, P. (2025) *Haemosporidian Infection Prevalence Variation Across an Urban Gradient in a Songbird*. *Ecography*. Under Review.

Amaya-Mejia, W.*, Pavan, L*, Lilly, M., Swei, A., Dirzo, R., Sehgal, R.N.M. (2025) *Determinants of Avian Disease Occurrence Across a Fragmented Landscape in California*. *Parasites & Vectors*. Under Review.

Amaya-Mejia, W.*, Lim, S.*, Ma, L.*, Yeh, P., Shultz, A., (2025) *Feather Macrostructure Corresponds to Increased Temperature not Urbanization Across California*. *Scientific Reports*. Under Review.

Amaya-Mejia, W., Dodge, M., Morris, B., Dumbacher, J.P., Sehgal, R.N.M. (2022) *Phylogenetic analysis of avian haemosporidian parasites across islands of Milne Bay Province, Papua New Guinea*. *Parasitology Research*. doi.org/10.1007/s00436-022-07490-y

Lilly, M., **Amaya-Mejia, W.**, Pavan, L., Peng, C., Crews, A., Tran, N., Sehgal, R.N.M., Swei, A. (2022) *Local community composition drives avian *Borrelia burgdorferi* infection in tick infestation*. *Veterinary Sciences*. doi.org/10.3390/vetsci9020055

Gelinas, K., Ovid, D., **Amaya-Mejia, W.**, Ayala, R., Baek, H., et al. (2022) *Investigating Instructor Talk among Graduate Teaching Assistants in Undergraduate Biology Laboratory Classrooms*. *CBE – Life Sciences Education*. doi: 10.1187/cbe.21-10-0302

PRESENTATIONS

Amaya-Mejia, W.*, Ma, L., Freimuth, S., Sehgal, R.N.M., Yeh, P. Haemosporidian Infection Prevalence Variation Across an Urban Gradient in a Songbird. November 29th, 2024. VI International Conference on Malaria and related Haemosporidian Parasites of Wildlife. Medellin, Colombia. *Poster Presentation*.

- Ma, L.*, Lim, S.*, **Amaya-Mejia, W.**, Shultz, A., Yeh, P. Feather coloration corresponds to increased temperature, not urbanization, in dark-eyed juncos (*Junco hyemalis*) across California. August 7th, 2024. 2024 Ecological Society of America Conference. California, USA. *Undergraduate Poster Presentation*.
- Amaya-Mejia, W.***, Ma, L., Freimuth, S., Sehgal, R.N.M., Yeh, P. Predictors of Avian Malaria Prevalence in an Urban Landscape. June 26th, 2024. 2024 Ecology and Evolution of Infectious Diseases Conference. California, USA. *Poster Presentation*.
- Amaya-Mejia, W.***, Ma, L., Freimuth, S., Sehgal, R.N.M., Yeh, P. Avian haemosporidian infection prevalence in California as a reflection of environmental conditions. May 4th, 2024. Southern California Academy of Sciences 116th Annual Meeting. California, USA. *Oral Presentation*.
- Leung, V.*, **Amaya-Mejia, W.**, Yeh, P. Characterizing the gut microbiome diversity of urban and non-urban dark-eyed juncos (*Junco hyemalis*). August 11, 2023. BIG Summer Research Symposium. California, USA. *Undergraduate Poster Presentation*.
- Law, K.*, **Amaya-Mejia, W.**, Yeh, P. The co-evolutionary relationship between the dark-eyed junco and their avian haemosporidian parasites. August 11, 2023. BIG Summer Research Symposium. California, USA. *Undergraduate Poster Presentation*.
- Lim, S.*, Ma, L.*, **Amaya-Mejia, W.**, Yeh, P. Effects of urbanization on feather eumelanin of *Junco hyemalis* in southern California. May 24, 2023. 26th Annual Biology Research Symposium. California, USA. *Undergraduate poster presentation*.
- Amaya-Mejia, W.***, Aguirre, A., Yeh, P. Disease and genetic changes in urban dark-eyed juncos (*Junco hyemalis*). February 7, 2023. Santa Monica Bay Audubon Society. California, USA. *Invited Oral Presentation*.
- Aguirre, A.*, **Amaya-Mejia, W.**, Yeh, P. An Analysis of Sexual Selection and Major Histocompatibility Complex Diversity of Dark-Eyed Juncos. November 10, 2022. Annual Biomedical Research Conference for Minoritized Scientist. California, USA. *Undergraduate Presentation*.
- Aguirre, A.*, **Amaya-Mejia, W.**, Yeh, P. An Analysis of Sexual Selection and Major Histocompatibility Complex Diversity of Dark-Eyed Juncos. August 24, 2022. Summer Programs for Undergraduate Research Showcase. California, USA. *Undergraduate Presentation*.

AWARDS

2023	Cota-Robles Fellowship, \$25,000
2022	Pasadena Audubon Society Research Grant, \$3000
2022	Lida Scott Brown Quarter Fellowship, \$7500
2021	Lida Scott Brown Research Grant, \$1500
2021 and 2022	Ford Foundation Honorable Mention
2021	Western Field Ornithology Research Grant, \$750
2021 and 2022	La Kretz Center and Stunt Ranch Research Grant, \$6900
2021	Chancellor's Award for Community-Engaged Scholars, \$10,000
2020	Cota-Robles Fellowship, \$25,000
2020	Graduate Dean Scholarship, \$2,500
2020	Competitive Edge Program, \$6,000

OUTREACH AND RELATED EXPERIENCES

Association for Multi-Ethnic Bioscientists' Advancement
2021-Present
UCLA

Active board member of AMEBA. Initiated and organized numerous graduate-student focused events designed to increase diversity, representation, inclusion, and retention of students within the Life Sciences department at UCLA.

Graduate Teaching Assistant

2018 -2019, 2022-Present

San Francisco State University
UCLA

Instructor for lab and discussion sections, including both independent and co-instructor for various biology courses. Provided lectures on molecular, cellular, ecological, evolutionary, and developmental biology. Facilitated with student-led laboratory and discussion exercises, and knowledge assessment.

Bruins-In-Genomics (BIG) Summer Program Mentor

2023

UCLA

Summer program for two undergraduate students aimed at providing research opportunities in the field of genomics and computational biology. Two research projects included quantifying diversity of avian gut microbiomes and understanding the phylogenetic relationships of haemosporidians of dark-eyed juncos.

UC-HBCU Initiative Mentor

2023

UCLA

Summer research program for two undergraduate students from Historically Black Colleges and Universities designed to provide a novel opportunity to conduct research. Projects included 1) understanding the effects of urbanization on the feeding behavior and diets of dark-eyed juncos and 2) characterizing the transmission of *Chlamydia* between dark-eyed juncos across an urban environment.

MARC Undergraduate Fellowship Mentor

2021-2024

UCLA

Multi-year program to support underrepresented students in STEM pursuing biomedical research projects. I provided guidance for a research project studying the diversity of MHC genes in different populations of dark-eyed juncos in southern California and whether this affects reproductive success.

Community Engagement - HoLA

2020 - 2023

UCLA

Collaboration with community partners to develop after-school course for underserved students living in Los Angeles. Students are encouraged to develop interests in native wildlife while engaging in the application of scientific thought. Foundational work focused on the studying the local effects of urbanization.

Entering Mentoring Training Workshop

2021

UCLA

NIH-funded workshop designed to improve mentoring relationships. Modules included aligning expectations, effective communication, diversity, inclusion, and equity considerations, foster independence, professional development, fostering self-efficacy, and establishing a mentorship philosophy plan.