

Cristian Román-Palacios

College of Information Science

University of Arizona

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Chronology of Education

2016–2020 **Ph.D. in Ecology and Evolution**, *The University of Arizona, Tucson, AZ.*

2016–2019 **M.Sc. in Ecology and Evolution**, *The University of Arizona, Tucson, AZ.*

2011–2015 **B.Sc. in Biology**, *Universidad del Valle, Colombia.*

Major fields: Biological data science, evolutionary biology, biodiversity loss, climate change, machine learning, bioinformatics, and biostatistics.

Chronology of Employment

2023–current **Assistant Professor**, *University of Arizona, College of Information Science.*

2021–2023 **Assistant Professor of Practice**, *University of Arizona, College of Information Science.*

2021 **Staff Researcher**, *University of California, Los Angeles.*

2021 **Postdoctoral Researcher**, *Temple University.*

Affiliations and Leadership

2024–current **Elected Faculty Senator**, *University of Arizona, College of Information Science.*

2024–current **Appointed Faculty Member**, *University of Arizona, Diversity, Equity, and Inclusion Committee, Faculty Senate.*

2024–current **Affiliated Faculty**, *University of Arizona, Bio5 Institute.*

2024–current **Affiliated Faculty**, *University of Arizona, Climate Change Adaptation and Mitigation through Biodiversity Informatics Education and Mentoring (CAMBIUM).*

2024–current **Affiliated Faculty**, *University of Arizona, Southwest Center on Resilience for Climate Change and Health (SCORCH).*

2023–current **Affiliated Faculty**, *University of Arizona, Bridging Biodiversity and Conservation Science (BBCS).*

2022–current **Affiliated Faculty**, *University of Arizona, Department of Mathematics.*

Honors and Awards

- 2025 **Excellence in Research Award** *College of Information Science, University of Arizona*
- 2022 **Afro-Colombian of the Year (STEM)** *El Espectador and Fundación Color de Colombia*
- 2022 **Award for Faculty Leadership** *College of Information Science, University of Arizona*
- 2021–2022 **Early Career Fellow** *Center for Diverse Leadership in Science, University of California, Los Angeles*
- 2020 **Graduate Award in Scholarship** *College of Science, University of Arizona*
- 2015 **Best National Score in Biology** *Colombia – ICFES, Saber Pro*
- 2011–2016 **Outstanding Academic Achievement** *School of Natural and Exact Sciences, Universidad del Valle*

Service/Outreach

Local/State Outreach

- 2020 **Youth Advisory Council Member**, Office of Congressman Raúl M. Grijalva, Tucson, AZ
- 2018 **Science Fair Judge**, Davis Bilingual Magnet Elementary School, Tucson, AZ
- 2018 **Science Fair Judge**, Sam Hughes Elementary School, Tucson, AZ
- 2018 **Presenter**, Ecology and Evolutionary Biology Booth, Science City, Tucson Festival of Books, University of Arizona, Tucson, AZ

National/International Outreach

Grant Ad Hoc Reviewer

- 2023 Graduate Research Fellowship Program (GRFP), Ecology and Evolutionary Biology, National Science Foundation
- 2022 Graduate Research Fellowship Program (GRFP), Ecology and Evolutionary Biology, National Science Foundation
- 2021 Colombian Administrative Department of Science, Technology and Innovation (Spanish: *Departamento Administrativo de Ciencia, Tecnología e Innovación; Colciencias*)

Journal Article Ad Hoc Reviewer

- 2024 *Journal of Biogeography* (JIF 3.56), *European Journal of Taxonomy* (JIF 1.19), *Annals of Botany* (JIF 3.43)
- 2023 *Nature Ecology & Evolution* (JIF 14.1), *Methods in Ecology and Evolution* (JIF 6.65), *Papéis Avulsos de Zoologia* (JIF 0.74)
- 2022 *Zootaxa* (JIF 0.8), *Journal of Insect Biodiversity* (JIF 0.7)
- 2021 *EntomoBrasilis* (JIF 0.68)
- 2020 *Journal of Insect Biodiversity* (JIF 0.7), *EntomoBrasilis* (JIF 0.68)

- 2019 *Mammal Review* (JIF 4.3), *Annals of Botany* (JIF 3.43), *American Journal of Botany* (JIF 2.29), *Amphibia-Reptilia* (JIF 1.0), *Biota Colombiana* (JIF 0.85), *EntomoBrasilis* (JIF 0.68)
- 2018 *Molecular Phylogenetics and Evolution* (JIF 3.6), *International Journal of Tropical Biology and Conservation* (JIF 0.8), *Biota Colombiana* (JIF 0.85), *EntomoBrasilis* (JIF 0.68)
- 2017 *Biota Colombiana* (JIF 0.85), *EntomoBrasilis* (JIF 0.68)

National Professional Organization Service

- 2022–2024 **Member of the Technical Committee**, Association for Computing Machinery Southeast Conference (ACMSE).

International Professional Organization Service

- 2021–current **Contributor and Reviewer**, Tools and R Packages for Open Science (ROpenSci).
- 2027 **Co-chair and Main Organizer**, Colombian National Conference on Evolution, Cali, Colombia
- 2021 **Member of the Scientific Committee**, First Latinoamerican Congress on Evolution. Phylogeny and Biogeography Track (Spanish: *Primer Congreso Latinoamericano de Evolución - Línea de Filogenética y Biogeografía*)

Other

- 2021 **Instructor**, bilingual semester-long course on fundamental Geographic Information Systems (GIS) for community leaders in Los Angeles (n = 10). Co-taught with Dr. Paige Hoel. Delivered in partnership with Esperanza Community Housing and the Center for Diverse Leadership in Science, University of California, Los Angeles
- 2017 **Invited Speaker**, joint event hosted by the Office of Latin American Partnership Initiatives (OLAPI), University of Arizona, and the Colombian Institute of Educational Credit and Technical Studies Abroad (ICETEX; Spanish: *Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior*). Presentation focused on key differences between U.S. and Colombian academic systems and pathways to graduate education in the U.S.

Departmental Committees

- 2019 **Graduate Student Representative**, Faculty Search Committee, Department of Ecology and Evolutionary Biology, University of Arizona

College Committees

- 2022–current **Member**, Curriculum Committee, College of Information Science, University of Arizona
- 2025 **Reviewer**, Graduate Admissions Committee, College of Information Science, University of Arizona

- 2021–2023 **Reviewer**, Graduate Admissions Committee, College of Information Science, University of Arizona
- 2020 **Member**, Race and Climate Committee, College of Science, University of Arizona
- 2017–2018 **Graduate Student Representative** for the Department of Ecology and Evolutionary Biology in the Climate Committee at the College of Science, University of Arizona

University Committees

- 2024–current **Appointed Faculty Member**, Diversity, Equity, and Inclusion Committee, Faculty Senate, University of Arizona
- 2021 **Reviewer**, Dr. Maria Teresa Velez – Marshall Foundation Dissertation Scholarship Committee, University of Arizona

Publications/Creative Activity (Published or Accepted)

*highlights **indicates work based on graduate school years

+ indicates co-author is a University of Arizona graduate student

++ indicates co-author is a University of Arizona undergraduate student

Refereed journal articles, published or accepted in final form

47. García-Verdugo, H. D., & **Román-Palacios, C.** 2025. LabOps: A flexible self-hosted workflow of open source tools for efficient collaboration within research laboratories. *PLOS Computational Biology*, 21(7), e1013248.
46. Basava, K., Alam, M. N. U., Roberts, L.++, Martinet, K., Cherry, P.+, García-Verdugo, H., & **Román-Palacios, C.** 2025. Mapping nonhuman cultures with the Animal Culture Database. *Scientific Data*, 12(1), 1-11.
45. Zeng, Y., & **Román-Palacios, C.** 2025. Macroevolutionary Rates of Species Interactions: Approximate Bayesian Inference from Cophylogenies. *bioRxiv*, 2025-05.
44. Alam, M.N.U.++, **Román-Palacios, C.**, Copetti, D. and Wing, R.A., 2025. Universal orthologs infer deep phylogenies and improve genome quality assessments. *bioRxiv* (accepted in *BMC Biology*), pp.2025-02.
43. Tripathi, A., [11 co-authors], **Román-Palacios, C.**, [9 co-authors], and Lynch-Stieglitz, J. 2025. Clumped isotope thermometry in foraminifera as a tool in paleoceanography: New planktic and benthic data and constraints on non-thermal effects. *Authorea Preprints* (10.22541/essoar.173775834.43995341/v1).
42. Martinet, K. M., **Román-Palacios, C.**, and Harmon, L. J. 2025. SSARP: An R Package for Easily Creating Species-and Speciation-Area Relationships Using Web Databases. *bioRxiv*, 2024-12.

41. Elliot Gould, ... [184 authors]..., **Cristian Román-Palacios**, ... (68 authors)..., Emily M. Tompkins. 2023. Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *BMC Biology*: 23:35.
40. Arnold, A., Mering, J., Chari, L., **Román-Palacios, C.**, [21 co-authors], and Tripati, A. 2024. Comparative clumped isotope temperature relationships in freshwater carbonates. *The Depositional Record*. Early view.
39. Savage, A. M., [7 co-authors], **Román-Palacios, C.**, [15 co-authors], Gotanda, K. M. 2024. Online toolkits for collaborative and inclusive global research in urban evolutionary ecology. *Ecology and evolution*, 14(6), e11633.
38. Estacio, I., **Román-Palacios, C.**, Hoover, J., Li, X., and Lim, C. 2024. Open-source automatic extraction of Urban Green Space: Application to assessing improvement in green space access. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 10, 65-72.
37. Ehsani, M.R.++, Behrangi, A., **Román-Palacios, C.**, Huffman, G.J. and Adler, R.F., 2024. Using CloudSat to Advance the Global Precipitation Climatology Project (GPCP) over Antarctica. *Remote Sensing of Environment*, 308, p.114199.
36. Sarria-Rodríguez, V., Gonzalez-Obando, R., Rivera-Franco, N., Cardenas-Henao, H. and **Román-Palacios, C.**, 2024. Holarctic Lineages Cannot Inform Diversity and Evolution in the Neotropics—the barklice family Psocidae as a case study. *Insect Systematics and Evolution*, 1(aop), pp.1-14.
35. Savage, A., Willmott, M., Moreno, P., Li, D., Malesis, A., Jagiełło, Z., Miles, L., Kuzyo, H., **Román-Palacios, C.**, Salazar, D. and Verrelli, B., 2024. Online toolkits for collaborative and inclusive global research in urban evolutionary ecology. *Authorea Preprints*.
34. **Cristian Román-Palacios**. (2023). Digest: Unveiling the role of chemical communication in lizard diversification. *Evolution*, qpad148.
33. **Cristian Román-Palacios**. (2023). The phruta R package: increasing access, reproducibility, and transparency in phylogenetic analyses. *Methods in Ecology and Evolution*, 14:2284-2299. *Shortlisted for the 2023 Robert May Prize*
32. Xiao-Yu Zhu, Shi-Yang Wu, Yi-Jiao Liu, Yun Bai, **Cristian Román-Palacios**, Zheng Li, Zhu-Qing He. (2022). *Goniurosaurus wangshu* sp. nov., a new species of Tiger Gecko from Guangdong, China (Squamata: Eublepharidae). *Zootaxa*, 5188: 544-558.
31. Shi-Yang Wu, Xiao-Yu Zhu, Yi-Jiao Liu, Gustavo Silva De Miranda, **Cristian Román-Palacios**, Zheng Li, Zhu-Qing He. (2022). A new species of whip spider, *Sarax sinensis* sp. nov., from Fujian, China (Arachnida: Amblypygi: Charinidae). *Zootaxa*, 5162: 397-409.

30. **Cristian Román-Palacios**, Daniela Moraga-Lopez, and John J. Wiens (2022). The origins of global biodiversity on land, sea, and freshwater. *Ecology Letters*, 25:1376-1386. *Shortlisted for the 2022 Early Career Researcher Award at Ecology Letters*
29. **Cristian Román-Palacios**, April M. Wright, and Josef C. Uyeda (2021). treedata.table: A wrapper for data.table that enables fast manipulation of large phylogenetic trees matched to data. *PeerJ*, 9: e12450.
28. Xiao-Yu Zhu, Shi-Yang Wu, S. Y., Yi-Jiao Liu, Chris R. Reardon, **Cristian Román-Palacios**, Zheng Li, Zhu-Qing He. A new species of whip spider, *Weygoldtia hainanensis* sp. nov., from Hainan, China (Arachnida: Amblypygi: Charinidae). *Zootaxa*, 5082(1), 65-76.
27. Xiao-Yu Zhu, Yi-Jiao Liu, Yun Bai, **Cristian Román-Palacios**, Zheng Li, Zhu-Qing He. *Goniurosaurus chengzheng* sp. nov., a new species of Leopard Gecko from Guangxi, China (Squamata: Eublepharidae). *Zootaxa* 996(3), 540–554, doi:10.11646/zootaxa.4996.3.8.
26. **Cristian Román-Palacios**, Cesar A. Medina, Shing H. Zhan, Michael S. Barker. Animal chromosome counts reveal similar range of chromosome numbers but with less polyploidy in animals compared to flowering plants. *Journal of Evolutionary Biology*, doi:10.1111/jeb.13884.
25. Robert N Ulrich, Maxence Guillermic, Julia Campbell, Abbas Hakim, Rachel Han, Shayleen Singh, Justin D Stewart, **Cristian Román-Palacios**, Hannah M Carroll, Ilian DeCorte, Rosaleen E Gilmore, Whitney Doss, Aradhna Tripati, Justin B Ries, Robert A Eagle. 2021. Patterns of element incorporation in calcium carbonate biominerals recapitulate phylogeny for a diverse range of marine calcifiers. *Frontiers in Earth Science, section Geochemistry*, doi:10.3389/feart.2021.641760.
24. Tania Hernandez-Hernandez*, Elizabeth C. Miller*, **Cristian Román-Palacios***, and John J. Wiens*. 2021. Speciation across the Tree of Life. *Biological Reviews*, doi:10.1111/brv.12698. *Equal contribution
23. Elizabeth C. Miller*, and **Cristian Román-Palacios***. 2021. Evolutionary time explains the global distribution of freshwater fish diversity. *Global Ecology and Biogeography*, 30:749-763, doi:10.1111/geb.13253. *Equal contribution
22. Xiao-Yu Zhu, Guang-Yu Chen, **Cristian Román-Palacios**, Zheng Li, Zhu-Qing He. 2020. *Goniurosaurus gezhi*, a new gecko species from Guangxi, China (Squamata: Sauria: Eublepharidae). *Zootaxa*, 4852:211–222.
21. **Cristian Román-Palacios***, Yherson F. Molina*, and Michael S. Barker. 2020. Polyploidy increases overall diversity despite higher turnover than diploids in the Brassicaceae. *Proceedings of the Royal Society of London*, 287:20200962. *Equal contribution

20. **Cristian Román-Palacios**, and John J. Wiens. 2020. Recent responses to climate change reveal the drivers of species extinction and survival. **Proceedings of the National Academy of Sciences of the United States of America**, 117:4211–4217. **Recommended in **Faculty Opinions** (former **Faculty1000**).
- **Featured in stories on several news and science related sites. These include news outlets in the U.S. (e.g. *CNN*, *USA Today*, *CBS News*, *Yahoo News*, *AOL*, *MSN*, *Fox News*, *New York Post*, *New York Daily News*, *Arizona Daily Star* [with interview], *Miami Herald*, *Kansas City Star*, *Indianapolis Star*, *Sacramento Bee*, *Charlotte Observer*, and *Detroit Free Press*, *Salt Lake Tribune*), and other countries including the United Kingdom (*Daily Mail*, *The Independent*, *The London Economic*, *The Irish Sun*, *Metro*), India (*Tribune India*, *India Times Post*, *Outlook India*, *The Week*, *Canindia*, *ProKerala*), Australia (*10Daily*), France (*Slate*, *Free*, *Futura-Science*), Italy (*Galileo*), Spain (*La Vanguardia*), Sweden (*ETC*), Poland (*Polish Press Agency*), Russia (*Life*), Slovenia (*Delo*), Bulgaria (*Novinite*), Brazil (*Galileu*), and Latin America (*infosurhoy*). Featured on science websites including *Popular Science* (with interview), *Wildlife.org* (with interview), *Futurity*, *IFL Science*, *ZME Science*, *SciTech Daily*, *Muy Interesante* (Spain), and the *NSF News* site. Interview for the climate magazine *The Grist*. Interview on podcast *The Climate Pod*. TV interview on *KVOA* (Tucson; lead story). Radio interview on *BBC World Service*.
19. **Cristian Román-Palacios**, Joshua Scholl, and John J. Wiens. 2019. Evolution of diet across the animal Tree of Life. **Evolution Letters**, 4:339–347. **Featured in a news story in *Science*, and other science-related websites (*phys.org*, *Science Daily*, and *UA News*). Newspaper column in *Södermanlands Nyheter*. Radio interview on *Arizona Science*.
18. Andreas Meyer, **Cristian Román-Palacios**, and John J. Wiens. 2018. BAMM gives misleading results in simulated and empirical datasets. **Evolution**, 72:2257–2266.
17. Alfonso N. Garcia-Aldrete, Nancy S. Carrejo, Julian Mendivil, Nadia Calderón, Oscar Saenz, Jefferson Panche, **Cristian Román-Palacios**, and Ranulfo Obando-Obando. 2018. Checklist of ‘Psocoptera’(Psocodea) of Colombia and identification key to families. **Dugesiana**, 25:77–103.
16. **Cristian Román-Palacios**, and John J. Wiens. 2018. The Tortoise and the Finch: testing for island effects on diversification using two iconic Galápagos radiations. **Journal of Biogeography**, 45:1701–1702.
**Highlighted as *Editor's Choice*.
15. **Cristian Román-Palacios**, Rosario Castañeda, and Jose Julian Tavera. 2018. When did *Anolis* lizards diverge? A comparison of multiple dating strategies. **Molecular Phylogenetics and Evolution**, 127:655–668.

14. **Cristian Román-Palacios**, Jakob Damgaard, Cheng, Lanna, Felipe Ferraz Figueiredo Moreira, Tom A. Weir, and Herbert Zettle. 2018. Molecular phylogeny of sea skaters and their freshwater relatives (Hemiptera: Heteroptera: Gerridae: Halobatinae). **Journal of Insect Systematics and Evolution**, 51:139–240.
13. **Cristian Román-Palacios**, and Alejandro Valencia-Zuleta. 2018. On the Data Deficient amphibians from Colombia. **Revista de Biología Tropical**, 66:1272-1281.
12. **Cristian Román-Palacios**, Yherson Franchesco Molina-Henao, and Ranulfo Gonzalez-Obando. 2017. On the divergence of Psocidae (Psocodea, Psocomorpha): Fossils or biogeography. **Boletín del Museo de Entomología de la Universidad del Valle**, 17:37-46.
11. **Cristian Román-P**, Sara Fernández-Garzón, Alejandro Valencia-Zuleta, Andrés F. Jaramillo-Martínez, and Ronald A. Viáfara-Vega. 2017. Lista anotada de la herpetofauna del departamento del Quindío, Colombia. **Biota Colombiana**, 18:251-281.
10. **Cristian Román-Palacios**, Sara Fernandez-Garzon, Jenny Johana Gallo-Franco, Alan Giraldo-Lopez, Monica Hernandez-Lopez, Jun Ishida-Castañeda, and Wilmar Bolivar-Garcia. 2017. Uso de microhabitat por anuros en un fragmento de bosque seco intervenido del Magdalena medio, Guarinocito, Colombia. **Boletín Científico Centro De Museos Museo De Historia Natural**, 20:181-196.
9. **Cristian Román-Palacios**, and Cesar Román Valencia. 2017. Dieta y reproducción de *Bryconamericus caucanus* (Characiformes: Characidae) en La Venada, Río Quindío, Colombia. **Revista MVZ Córdoba**, 2:1-17.
8. **Cristian Román-Palacios**, Alfonso Neri García-Aldrete, and Ranulfo Gonzalez Obando. 2016. Historical biogeography of Thrysophorini psocids and description of a new Neotropical species of *Thyrsopsocopsis* (Psocodea: Psocomorpha: Psocidae). **European Journal of Entomology**, 194:1-16.
7. **Cristian Roman-Palacios**, Ranulfo Obando-Gonzalez, and Alfonso Neri Aldrete. 2016. Uncovering the diversity of the neotropical genus *Elaphopsocus* ('Psocoptera': Psocidae: Amphigerontiinae): from one to ten species. **Zootaxa**, 4162:373-380.
6. **Cristian Román-Palacios**, and Alfonso N. García Aldrete. 2015. A new Neotropical genus of Blastini (Psocodea:'Psocoptera': Psocidae: Amphigerontiinae). **Zootaxa**, 4000:392-396.
5. Daniela Moraga Lopez, and **Cristian Román-Palacios**. 2015. Information criteria on multimodel selection of parametric regression: Biological applications. **Revista Comunicaciones en Estadística**, 8:45-57.

4. **Cristian Román-Palacios**, Ranulfo Gonzalez Obando, and Alfonso N. Garcia Aldrete. 2015. The genus *Elaphopsocus* Roesler (Psocodea: 'Psocoptera': Psocidae) with six new species from Brazil and Colombia. **Zootaxa**, 3957:151–168.
3. **Cristian Román-Palacios**, and Cesar Román Valencia. 2015. Hábitos tróficos de dos especies sintópicas de carácidos en una quebrada de alta montaña en los Andes de Colombia. **Revista Mexicana de Biodiversidad**, 86:1–7.
2. **Cristian Román-Palacios**, Alfonso N. García Aldrete, and Ranulfo Gonzalez-Obando. 2014. *Elaphopsocoides*, a new genus of Psocidae (Psocodea: 'Psocoptera') from Valle del Cauca, Colombia. **Zootaxa**, 3873:93–100.
1. **Cristian Román-Palacios**, Cesar Román Valencia, and Donald C. Taphorn. 2014. Trophic and reproductive ecology of a neotropical characid fish *Hemibrycon brevispini* (Teleostei: Characiformes). **Caldasia**, 36:289–304.

Other Scholarship

Computer Programs / Open Code

BarrioMap	Shiny app for participatory urban planning.	Available at https://github.com/RomanPalacios-lab/BarrioMap
plagiarized	Tool for detecting plagiarism in coding assignments.	Available at https://viz.datascience.arizona.edu/plagiarized/
phruta	R package for streamlined phylogenetic workflows.	Available at https://github.com/ropensci/phruta
autogradeR	R package for automated grading in data science courses.	Available at https://github.com/cromanpa94/autogradeR
bayclumpr	R package for analyzing clumped isotope data.	Available at https://cran.r-project.org/web/packages/bayclumpr/
BayClump	Shiny app for visualizing clumped isotope datasets.	Available at https://github.com/Tripati-Lab/BayClump
BTOpenNLP	Tool for training NLP models using OpenNLP.	Available at https://github.com/cromanpa94/BTOpenNLP
treedata.table	R package for phylogenetic data handling with <code>data.table</code> .	Available at https://github.com/ropensci/treedata.table
rBT	R wrapper for BayesTraits phylogenetic modeling.	Available at https://github.com/cromanpa94/rBT

Other

- Outreach Cristian Román-Palacios. 2020. "Respuestas al cambio climático revelan los factores causantes de la extinción y sobrevivencia de las especies." *Boletín Colombiano de Biología Evolutiva*, 8: 22–24.

- Outreach Cristian Román-Palacios. 2019. “Five tips for nailing your US-based graduate-school applications.” *Nature*, 10.1038/d41586-019-00845-z.
- Outreach Cristian Román-Palacios. 2017. “P-valores, alpha y beta: ¿Cuánto nos equivocamos en Biología?” *Boletín del Posgrado en Ciencias Biología, Universidad del Valle*, 3: 24–26.
- Outreach Cristian Román-Palacios. 2016. “¿Conservan las áreas protegidas la biodiversidad en Colombia?” *Boletín del Posgrado en Ciencias Biología, Universidad del Valle*, 2: 79–82.

Scholarly Presentations

Colloquia and Seminars (Invited)

Research Talks

- 2025 Encuentros: Ciencia y Comunidad, Charles Darwin Research Station (CDRS) (Spanish: *Estación Científica Charles Darwin*, Puerto Ayora, Santa Cruz Island, Galápagos, Ecuador; Host: MSc Andrea Carvajal-Román
- 2025 The Aquatic Ecology & Evolution spring seminar series, University of Bern and the Swiss Federal Institute of Aquatic Science and Technology, Switzerland; Host: Dr. Ole Seehausen
- 2025 Geosciences Seminar Series, University of California, Los Angeles; Host: Dr. Aradhna Tripati
- 2023 The Institute of Ecology (Spanish: *Instituto de Ecología*), Xalapa, Mexico. Host: Graduate students and Dr. Fabricio Villalobos
- 2023 Louisiana State University. Host: Department of Biology
- 2023 University of The Andes (*Universidad de los Andes*, Bogotá, Colombia). Host: Department of Biology
- 2023 University of Arizona. Host: College of Information Science
- 2022 University of California, Los Angeles. Host: Dr. Aradhna Tripati
- 2022 Rutgers University, Camden. Host: Center for Computational and Integrative Biology (CCIB)
- 2021 Rutgers University, Camden. Host: Dr. Anthony Geneva
- 2019 Universidad del Valle, Colombia. Host: Dr. Ranulfo Gonzalez
- 2019 Universidad Nacional de Colombia, Colombia. Host: Dr. Carlos Sarmiento
- 2019 Universidad del Quindío, Colombia. Host: Dr. Cesar Román
- 2019 Universidad del Valle, Colombia. Host: Dr. Ranulfo Gonzalez
- 2018 Congress of the Colombian Entomological Society (*Congreso de la Sociedad Colombiana de Entomología*), Cali, Colombia

Workshops and Guest Lectures

- 2023 **Workshop instructor**, Introduction to Machine Learning and Macroevolution, Instituto de Ecología (INECOL), Xalapa, Mexico

- 2023 **Instructor**, National Summer Undergraduate Research Project, University of Arizona — “Introduction to Data Science and Visualization”
- 2022 **Instructor**, Data Science Institute, University of Arizona — Lecture for Data Science Ambassadors Cohort
- 2021 **Instructor**, University of California, Los Angeles — Introduction to R and ggplot2
- 2021 **Instructor**, University of California, Los Angeles — “Introduction to Biostatistics”

Research Networks

- 2024 National Science Foundation, Research Collaborative Network on Urban EcoEvo, Seattle, USA
- 2022 National Science Foundation, Research Collaborative Network on Urban EcoEvo
- 2022 National Science Foundation, US Long-Term Ecological Research, Long Term Ecological Research Network, Network
- 2022 National Science Foundation, Research Collaborative Network, Urban EcoEvo

Panels

- 2022 ASU Biocollections JEDI Panel, Arizona State University

Conference Symposium (Submitted)

Presentations and Participation

- 2024 United Nations Biodiversity Conference

Recent Conference Participation and Presentations

- 2023 World Climate Research Programme (WCRP) Open Science Conference — Poster on GIS and community health with Esperanza Community Housing and the Center for Diverse Leadership in Science (UCLA)
- 2023 Race, Ethnicity, and Place Conference, Washington DC — Presenter: “Crossing the Digital / Analog Divide in Teaching Community-Centered, Spatial Justice Practice” (with Mackenzie Waller and Ariana Cantú)
- 2023 useR — Attendee
- 2023 latinR — Attendee
- 2023 iConference — Early Career Symposium Attendee
- 2022 Princeton Workshop: “Leakage and the Reproducibility Crisis in ML-based Science”
- 2022 Society of Systematic Biologists, Standalone Meeting, Mexico City
- 2018 Evolution Meeting, Montpellier, France — Poster: “On the Interplay Between Diversification Rates, Hybridization, Geography, and Sexual Selection: A Case Study with Corvoid Birds”
- 2018 Anolis Symposium — Presentation (by Rosario Castañeda): “When Did *Anolis* Lizards Diverge? A Comparison of Multiple Dating Strategies”

- 2018 Origins of Adaptive Radiation Symposium, Waimea, USA — Poster: “The Tortoise and the Finch: Testing for Island Effects on Diversification Using Two Iconic Galápagos Radiations”
- 2017 International Biogeography Society (IBS) Special Meeting: The Biogeography of Ecology
- 2015 National Conference on Evolution, Armenia, Colombia — Poster: “Diversification Histories in Parasitic and Free-Living Lice (Psocodea)”

Media

- 2024 **NPR, USA** (December 2024) — “*Climate Change and Extinction Risk*”
- 2022 **El Espectador, Colombia** (December 2022) — “*Y los ganadores en los premios a los Afrocolombianos del año 2022 son...*”
- 2022 **El Espectador, Colombia** (December 2022) — “*Estos son los nominados en Afrocolombianos del Año 2022*”
- 2022 **Library Journal** (March 2022) — “*After the MLIS*” by Jennifer A. Dixon
- 2020 **Nature Index** (March 2020) — “*Front Line Scientists Call for Mental Health Support in the Wake of Catastrophic Ecosystem Loss*” by Gemma Conroy
- 2016 **Universidad del Valle, Agencia de Noticias** (April 2016) — “*Egresado de Biología de Univalle Gana Beca para Doctorado en USA*”

Community Presentations Related to Research or Teaching

- 2024 The Bio/Diversity Project, The Data Diversity Lab, University of Arizona
- 2023 Talk: Una introducción breve al cambio climático y carbono cero, Semillero de Becarios Quibdó y Buenaventura, Fundación Color de Colombia
- 2022 Python and R coding instructor for Youth Education and Empowerment in STEM, Los Angeles, CA partnered with The Center for Diverse Leadership in Science (CDLS) at the University of California, Los Angeles
- 2022 Talk: Qué hace un biólogo, Devolver ConCiencia, Colombia
- 2018 Data Science Ambassador for The University of Arizona
- 2019 Data carpentry workshop helper. Tucson, AZ
- 2018 Data carpentry workshop helper. Tucson, AZ

Grants and Contracts

All grants list percent effort and role where applicable. Amounts in USD.

Federal Grants (Funded)

Principal or Co-Principal Investigator

- 2024 U.S. Geological Survey (USGS) — “Biotic and Abiotic Drivers of Tick-Borne Disease Prevalence” (\$438,945). Co-PI: Cristian Román-Palacios; PI: Sabrina McNew. Subaward: \$90,000

- 2024 National Science Foundation (NSF) — “CAMBIUM: Climate Adaptation and Mitigation Through Biodiversity Informatics” (\$3,000,000). Key Personnel: Cristian Román-Palacios. Subaward: \$250,000
- 2023 National Institutes of Health (NIH) — “SCORCH: Southwest Center for Outreach and Resilience in Climate Change and Health” (\$3,827,073). Co-I: Cristian Román-Palacios. Subaward: \$445,845

University Internal Grants

Principal Investigator

- 2024 Faculty Seed Grant, University of Arizona — “Macroevolution of Lifespans Across Animals” (\$15,000). PI: Cristian Román-Palacios
- 2024 VIP Program Catalyst Award, University of Arizona — “Vertically Integrated Projects (VIP)” (\$3,500). PI: Cristian Román-Palacios
- 2023 Innovation and Impact / One Health Initiative, University of Arizona — “Extreme Weather, Power Outages, and One Health” (\$50,000). Co-PI: Cristian Román-Palacios
- 2023 College of Architecture, Planning and Landscape Architecture, University of Arizona — “Open Access Mapping and Formal Planning” (\$20,000). Co-PI: Cristian Román-Palacios

Private and Foundation Awards

Individual and Fellowship Awards

- 2024 National Geographic — “Supporting Colombian Undergraduates Through Programming and Phylogenetic Methods in R” (\$99,423). PI: Cristian Román-Palacios
- 2022 Center for Diverse Leadership in Science, UCLA — Early Career Fellow (\$2,000)
- 2021 Center for Diverse Leadership in Science, UCLA — Early Career Fellow (\$5,000)
- 2020 Robert W. Hoshaw Memorial Award, University of Arizona (\$5,000)
- 2020 Graduate Award in Scholarship, College of Science, University of Arizona (\$1,000)
- 2020 Galileo Circle Scholarship, University of Arizona (\$1,000)
- 2018 Data Science Fellowship, University of Arizona Libraries (\$1,000)
- 2018 Systematics Research Fund, Linnean Society and Systematics Association (\$1,600)
- 2018 William A. Calder III Memorial Scholarship, University of Arizona (\$4,200)

Travel and Meeting Awards

Conference Travel and Workshop Grants

- 2023 NSF — “Priming the STEM PhD Pathway” (PI: Monica Brown and Angelina Castagno, Northern Arizona University). Cristian Román-Palacios listed collaborator. Grant amount: \$1,000
- 2018 Evolution 2018 Travel Grant, Society of Systematic Biologists (\$500)
- 2018 Biodiversity Information Standards (TDWG), New Zealand — Travel Grant (\$2,000). *Declined*
- 2016 NSF R Workshop on Methods in Macroevolution (\$750)

Conference and Event Funding (PI or Organizer)

VI Colombian Meeting in Evolution

- 2017 American Genetics Association (AGA) — Event grant (\$10,000). Co-PI: Cristian Román-Palacios
- 2017 Society for the Study of Evolution (SSE) — Event grant (\$6,000). Co-PI: Cristian Román-Palacios
- 2017 Society for Molecular Biology and Evolution (SMBE) — Event grant (\$25,000). Co-PI: Cristian Román-Palacios

Other Academic Awards

- 2017 Banco de la República, Colombia — Research grant (\$6,000). PI: Cristian Román-Palacios
- 2015–2016 Jóvenes Investigadores e Innovadores “Virginia Gutiérrez de Pineda” Program, Colombia (\$7,700)
- 2011–2016 Outstanding Academic Achievement, School of Natural and Exact Sciences, Universidad del Valle, Colombia (ca. \$10,000)

Last updated on Friday 15th August, 2025

Extent of Undergraduate Teaching

- 2020 Fall Marine Biology (ECOL 170), grader — 127 students
2020 Summer Genetics (ECOL 320), fully online (5 weeks) — 51 students
2020 Spring Introductory Biology (ECOL 182L), 2 lab sections — 48 students
2019 Fall Marine Biology (ECOL 170), grader — 74 students
2019 Spring Introductory Biology (ECOL 182L), 2 lab sections — 43 students
2018 Fall Marine Biology (ECOL 170), grader — 127 students
2018 Spring Introductory Biology (ECOL 182L), 2 lab sections — 46 students
2017 Fall Marine Biology (ECOL 170), grader — 127 students
2017 Spring Introductory Biology (ECOL 182L), 2 lab sections — 45 students
2016 Fall Introductory Biology (ECOL 182L), 2 lab sections — 42 students

Extent of Graduate Teaching

- 2024 Summer Data Mining and Discovery (INFO 523) — 22 students
2023 Summer Data Mining and Discovery (INFO 523) — 23 students
2023 Spring Data Mining and Discovery (INFO 523) — 18 students
2022 Fall Data Mining and Discovery (INFO 523) — 23 students
2022 Summer Data Mining and Discovery (INFO 523) — 20 students
2022 Spring Data Mining and Discovery (INFO 523) — 30 students
2021 Fall Data Mining and Discovery (INFO 523) — 20 students

Extent of Co-Convened (Undergraduate/Graduate) Teaching

- 2023 Spring Introduction to Machine Learning (ISTA 421 / INFO 521) — 38 students
2022 Fall Introduction to Machine Learning (ISTA 421 / INFO 521) — 43 students
2022 Spring Introduction to Machine Learning (ISTA 421 / INFO 521) — 37 students
2021 Fall Introduction to Machine Learning (ISTA 421 / INFO 521), co-taught with Dr. Clayton Morrison — 34 students

Extent of Graduate level Teaching (Arizona Global)

- 2023-2025 GreatLearning
2021-2023 Upgrad

Invited Guest Lectures (Graduate and Undergraduate level)

- 2024 ECOL 596W - Special Topics in Ecology and Evolution A, Department of Ecology and Evolutionary Biology. Instructor: Dr. Sabrina McNew

Individual Student Contact

Graduate Advising — Main or Co-Advisor

- 2024 Swetha Kolloju — MSc in Information Science (co-advised with Dr. Sarah Bratt)
- 2024 Pradnya Raut — MSc in Information Science (Main advisor)
- 2024 Erika Kirkpatrick — MSc in Data Science (Main advisor)
- 2024 HM Abdul Fattah — MSc in Data Science (Main advisor)
- 2024 Shih-Hsuan Lo — MSc in Data Science (Main advisor)
- 2024 Jiayue He — MSc in Data Science (Main advisor)
- 2024 Ani Chitransh — MSc in Data Science (Main advisor)
- 2024 Tom Olla — MSc in Data Science (Main advisor)
- 2024 Rob Speer — MSc in Data Science (Main advisor)
- 2024 Gloria Moraa Angwenyi — MSc in Data Science (Main advisor)
- 2023 Yi Chien Lee — MSc in Management Information Systems (Main advisor)
- 2023 Ethan Davis — MSc in Data Science (Main advisor)
- 2023 Katie Stringham — MSc in Data Science (Main advisor)
- 2023 Darwood Martin — MSc in Data Science (Main advisor)
- 2023 YuanJea Hew — MSc in Data Science (Main advisor)
- 2023 Tingting Thompson — MSc in Data Science (Main advisor)
- 2023 Shophe Fournier — MSc in Data Science (Co-advisor)
- 2022–2023 Laura Palacios — MSc in Data Science (Main advisor)
- 2022 Eastern Kang — MSc in Data Science (Co-advisor)
- 2022 Kyle Arechiga — MSc in Information (Main advisor)
- 2022 Quan Gan — MSc in Information (Main advisor)
- 2022 Wonkyun Yim — MSc in Information (Main advisor)

Graduate Advising — Other Roles

- 2022–2023 Reza Ehsani — Ph.D. in Hydrology and Atmospheric Sciences (Minor advisor)
- 2022–2023 Salena Torres Ashton — Ph.D. student, Data Science Ambassadors Fellowship (Mentor)

Collaboration with Undergraduate and Graduate Students on Research Projects

Undergraduate Research Mentorship

- 2024–current Delaney Scott-Martin — BSc in Ecology and Evolutionary Biology and Anthropology (Research advisor)
- 2024–2025 Paige Cherry — BSc in Information Science (Research advisor)
- 2022–2023 Kyle Clements — BSc in Computer Science (Research advisor)

Independent Studies and Fellowships

- 2023 Sarthak Saldar — MSc in Data Science (Co-advisor)

Career Counseling

Thesis Supervision and Committee Membership

Undergraduate Theses

- 2018 Valentina Sarria Rodríguez — Undergraduate thesis: "Systematics and Evolution of Neotropical Psocidae", Universidad del Valle, Colombia — Honorable mention

Theses in Progress

- 2024–current MD Nafis Alam — Ph.D. in Plant Sciences (Co-advisor), University of Arizona

Theses Completed — Co-Chair

- 2022–2024 Danielle Van Boxel — Ph.D. in Applied Mathematics (Co-advisor), University of Arizona

Thesis Committee Membership

- 2023 Mike's student

- 2024–current Zeinab Alizadeh — Ph.D. Committee Member, University of Arizona

- 2024–current Henrey Desee — Ph.D. Committee Member, University of Arizona

- 2023–current Rachel Laura — Ph.D. Committee Member, University of Arizona

- 2023–current Shoma Bommema — Ph.D. Committee Member, University of Arizona

- 2024–2025 Brian McGinnis — Ph.D. Committee Member, University of Arizona

- 2023–2024 Hamidreza Vashaghian — Ph.D. Committee Member, University of Arizona

- 2023 Marcelo Cutrim — Ph.D. Committee Member, Instituto Nacional de Pesquisas da Amazônia (INPA), Brazil

Ph.D. Comprehensive Exam Committee

- 2023 Lia Ossana — Ph.D. in Environmental and Natural Resources (Minor Advisor), University of Arizona

Postdoctoral Researchers Supervised

- 2024–current Dr. Kristen Martinet — Postdoctoral Researcher, College of Information Science, University of Arizona

- 2024–current Dr. Kiran Basava — Postdoctoral Researcher, College of Information Science, University of Arizona

- 2024–current Ian Estacio — Postdoctoral Researcher, College of Information Science, University of Arizona

- 2024–2025 Yichao Zeng — Postdoctoral Researcher, College of Information Science, University of Arizona

Trained Staff

- 2023–2024 Héctor García — Laboratory Manager, College of Information Science, University of Arizona

Trained Student Workers

- 2024–current Isabella Ortiz — BSc in Information Science, iSchool (Advising team)

- 2024–2025 Eleanor Tuck — BSc in Information Science, iSchool (Advising team)

2024 Maddy Raker — BSc in Information Science, iSchool (Advising team)

Contributions to Instructional Innovations and Collaborations

Development of Online or Other Course Materials

- INFO 523 Design and development of course materials for Data Mining and Discovery
- INFO 521 Curricular contributions to Introduction to Machine Learning (graduate section)
- ISTA 421 Curricular contributions to Introduction to Machine Learning (undergraduate section)

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