Curriculum vitae

Guillermo Garcia-Costoya, Ph.D. · Postdoctoral Fellow, Georgia Institute of Technology

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Last updated November 2026

Professional appointments

2026– **Postdoctoral Fellow**
Department of Biology, Georgia Institute of Technology · Advisor: Dr. James Stroud

2021–2026 **Graduate Teaching / Research Assistant**
Department of Biology, University of Nevada, Reno

Education

May 2026 **Ph.D., Ecology, Evolution & Conservation Biology**
Department of Biology, University of Nevada, Reno · Advisor: Dr. Michael L. Logan

May 2020 **M.S., Biological and Environmental Science**
Mention in Ecology and Evolutionary Biology, University of Jyväskylä, Finland · Advisor: Dr. Lutz Fromhage

May 2017 **European Erasmus Internship Program**
University of Jyväskylä, Finland · Awarded 100%, 1st in the 2017 class · Supervisor: Dr. Andrés López-Sepulcre

May 2017 **B.Sc. in Biology**
Specialty in Biodiversity, University of Barcelona, Spain

Peer-reviewed publications

2026 Allochronic isolation between sympatric populations of an alpine butterfly

Halsch, C. A., Nice, C. C., Bell, J. K., Fordyce, J. A., Forister, M. L., **Garcia-Costoya, G.**, Shapiro, A. M., & Grames, E. M.
Evolution · doi:10.1093/evolut/qpag039

2025 Live birth in lizards: A process-based model for the roles of temperature, behavior, and life-history

Garcia-Costoya, G., Dominguez-Guerrero, S. F., Fromhage, L., Gifford, M. E., Riddell, E. A., & Logan, M. L.
Evolution Letters · doi:10.1093/evlett/qraf043

Using aerial thermography to map terrestrial thermal environments in unprecedented detail

Alujević, K.*, **Garcia-Costoya, G.***, Ratia, N., Schmitz, E., Godkin, R. S., Gopal, A. C., Bujan, J., & Logan, M. L.
(*Contributed equally)
Methods in Ecology and Evolution, 00, 1–15 · doi:10.1111/2041-210X.70096

2024 Response to von Schmalensee et al.

Garcia-Costoya, G., Williams, C. E., Faske, T. M., Moorman, J. D., & Logan, M. L.
Ecology Letters, 27(6), e14436 · doi:10.1111/ele.14436

2023 3D printed models are an accurate, cost-effective, and reproducible tool for quantifying terrestrial thermal environments

Alujević, K., Bakewell, L., Clifton, I., Cox, C., Frishkoff, L., Gangloff, E., **Garcia-Costoya, G.**, Gifford, M., Glenwinkel, M., Gulati, S., Head, A., Miles, M., Pettit, C., Watson, C. M., Wuthrich, K., & Logan, M. L.

Journal of Thermal Biology, 103762 · doi:10.1016/j.jtherbio.2023.103762

Evolutionary constraints mediate extinction risk under climate change

Garcia-Costoya, G., Williams, C. E., Faske, T. M., Moorman, J. D., & Logan, M. L.

Ecology Letters, 26(4), 529–539 · doi:10.1111/ele.14173 · Featured in newswise.com: "A lose-lose game: animals are under threat as the climate gets warmer and more variable" by Jennifer Spillane

2021 Realistic genetic architecture enables organismal adaptation as predicted under the folk definition of inclusive fitness

Garcia-Costoya, G., & Fromhage, L.

Journal of Evolutionary Biology, 34(7), 1087–1094 · doi:10.1111/jeb.13795

2020 Visible implant elastomer (VIE) success in early larval stages of a tropical amphibian species

Fouilloux, C. A., **Garcia-Costoya, G.**, & Rojas, B.

PeerJ, 8, e9630 · doi:10.7717/peerj.9630

In review & in preparation

Behavioral innovation enabled the poleward range expansion of a tropical ectotherm beyond its physiological limits

Garcia-Costoya, G., Cooper, T., Suh, J., Glenn, E., & Stroud, J. T.

In review at *Global Ecology and Biogeography*

Climate variability and the paradox of plasticity

Gunderson, A., Logan, M. L., & **Garcia-Costoya, G.**

In review at *Evolution* · Preprint

Little support for the extended pace of life syndrome in western fence lizards (*Sceloporus occidentalis*)

Gopal, A., **Garcia-Costoya, G.**, Ratia, N., Alujević, K., Charles, K. C., Glenwinkel, M., McKendree, S., Napier, K., Chapman, C., Dorny, A., Carmona-Hockstedler, E., & Logan, M. L.

In review at *Journal of Thermal Biology*

A light gradient promotes the long-term maintenance of a color polymorphism

Curlis, J. D., … **Garcia-Costoya, G.**, … (22 other co-authors)

In review at *Ecology Letters*

Genomic signatures and consequences of mitochondrial capture between woodrat species (*Neotoma*) across an environmental gradient

Everson, K. M., Holding, M. L., Coconis, A., del Carlo, R. E., Alvarez-Ponce, D., Nielsen, D., Patton, J., **Garcia-Costoya, G.**, Henderson, L., Simison, B. W., & Matocq, M. D.

In review at *PNAS*

The cost-of-living squeeze mediates selection on metabolic thermal reaction norms

Garcia-Costoya, G., Gopal, A., Ratia, N., Alujević, K., Glenwinkel, M., McKendree, S., Napier, K., Chapman, C., Dorny, A., Bain, K., Carmona-Hockstedler, E., Forister, G., & Logan, M. L.

In preparation

Software

throne: Using aerial thermography to map terrestrial thermal environments in unprecedented detail

R package, version 1.0 · GitHub · Documentation

Scientific talks & posters

Invited talks

2026 **Live birth in lizards: A process-based model for the roles of temperature, behavior, and life-history**
Invited lecture & discussion, International Working Group on the evolution of parity modes

2024, 2025 **How will ectotherms deal with climate change? Insights from professionally chasing lizards around for 3 years**
Invited lecture, Global Change Physiology class, University of Nevada, Reno

2024, 2025 **Connecting biochemistry to ecology to effectively forecast the effects of climate change**
Invited talk, Challenge-driven Accessible Research-based Mobile European University (CHARM-EU)

Selected conference talks & posters

Contributed to 14 conference presentations and posters, including four as lead author and two led by undergraduate students I mentored (denoted with *).

2026 **Territory thermal quality and prey availability constrain energy budgets and shape selection in desert lizards**
Garcia-Costoya, G., Gopal, A., Ratia, N., Alujević, K., Glenwinkel, M., McKendree, S., Napier, K., Chapman, C., Dorny, A., Bain, K., Carmona-Hockstedler, E., Forister, G., & Logan, M. L. Talk, Society for Integrative and Comparative Biology (SICB): Portland, OR

2024 **Towards a general model for the evolution of reptile viviparity**
Garcia-Costoya, G., Gopal, A., Ratia, N., Alujević, K., Glenwinkel, M., McKendree, S., Napier, K., Chapman, C., Dorny, A., & Logan, M. L. Talk, SICB: Seattle, WA

2024 **Parasitism and the pace of life in western fence lizards**
*Glenwinkel, M., **Garcia-Costoya, G.**, Gopal, A., Ratia, N., Alujević, K., McKendree, S., Napier, K., Chapman, C., Dorny, A., & Logan, M. L. Poster, SICB: Seattle, WA

2024 **Why are you blue? The role of coloration in the western fence lizard**
*Napier, K., **Garcia-Costoya, G.**, Gopal, A., Ratia, N., Alujević, K., Glenwinkel, M., McKendree, S., Chapman, C., Dorny, A., & Logan, M. L. Poster, SICB: Seattle, WA

2023 **Predicting ectotherm responses to climate change by quantifying shifts in thermal landscapes: a spatiotemporally explicit approach**
Garcia-Costoya, G., Alujević, K., Gopal, A., & Logan, M. L. Talk, SICB: Austin, TX

2022 **Damned if you do, damned if you don't: Adaptation to warmer environments leads to extinction in variable ones**
Garcia-Costoya, G., Faske, T., Moorman, J., & Logan, M. L. Talk, SICB: Phoenix, AZ

Other talks

2025 **To lay or not to lay: How climate mediates the conflicting interests of mothers and embryos to determine lizard reproductive strategies in the Great Basin**
Truckee Meadows Parks Foundation, Rosewood Series

2024 **A day in the life of a lizard: Stories from 2 years of studying the herpetofauna of the Great Basin Desert of Northern Nevada**
Great Basin Bird Observatory

Awards & funding

Total extramural funding: **$221,000** USD · Total intramural funding: **$23,900** USD

2026 **Biodiversity Postdoctoral Fellowship** (Declined)
Biodiversity Research Centre, University of British Columbia · $117,000 ($161,000 CAD)

2026 **Canada Impact+ Research Training Awards (CIRTA) Postdoctoral Fellowship** (Declined)
$102,000 ($140,000 CAD)

2025 **Outstanding Graduate Assistant Award**
College of Science, University of Nevada, Reno · $1,500

2024 **E.E. Williams Research Grant**
The Herpetologists' League · $1,000

2024 **Brussard Scholarship**
University of Nevada, Reno · $1,300

2024 **Ben and Beatrice Edwards Scholarship**
University of Nevada, Reno · $1,000

2023 **Diana Hadley-Lynch Scholarship**
University of Nevada, Reno · $2,100

2023 **Frederic Gaige Fund Award**
American Society of Ichthyologists & Herpetologists (ASIH) · $1,000

2023 **GR International Student Access Grant**
University of Nevada, Reno · $1,000

2023 **DEE Ray Huey Best Student Presentation Award finalist**
Society for Integrative and Comparative Biology (SICB) meeting, Austin, Texas

2022 **Ben and Beatrice Edwards Scholarship**
University of Nevada, Reno · $1,000

2022 **GR International Student Access Grant**
University of Nevada, Reno · $1,000

2022 **DEE Ray Huey Best Student Presentation Award finalist**
Society for Integrative and Comparative Biology (SICB) meeting, Phoenix, Arizona

2019 **International Student Excellence Grant**
University of Jyväskylä, Finland · $6,600

2017 **Bosch & Gimpera Collaboration Grant for Conservation Research**
$8,500

Teaching & mentorship

Teaching as a Graduate Teaching Assistant

2025–2026 **Herpetology (BIOL 432)**
University of Nevada, Reno

2022–2025 **Evolution (BIOL 415)**
University of Nevada, Reno

2022 **Principles of Biological Investigation (BIOL 195)**
University of Nevada, Reno

2021 **Human Anatomy & Physiology Lab**
University of Nevada, Reno

Mentorship of undergraduate & high school students

Research award: Nevada Undergraduate Research Award (NURA) · Graduate program: accepted into a graduate program · Hired: hired for a professional position

UNIVERSITY OF NEVADA, RENO · UNDERGRADUATES

Kate Bain Graduate program
Ethan Carmona
Kaitlyn Napier Research award Graduate program Hired
Neil Babu Research award
Griffin Pugh Graduate program
Cody Chapman
Shea McKendree Hired
Allison Dorny

UNIVERSITY OF BARCELONA · UNDERGRADUATES

Joan Espígol Hired
Nicolás Merino Graduate program

HEADWATERS SCIENCE INSTITUTE · HIGH SCHOOL

Michaela Fijas

Outreach

2026 **Fairchild Tropical Botanic Garden**
Outreach events on native and invasive lizard diversity in South Florida with high school students

2025 **Washoe County Parks Service**
Volunteered for the “Wildlife Wednesdays” talk series on the Great Basin’s herpetofauna

2025 **Truckee Meadows Parks Foundation**
Volunteered in the Junior Naturalist Program, “Tails from the field” activity

2024–2025 **Pyramid Lake Paiute Tribe Summer Camp**
Educated youth about Great Basin herpetofauna and techniques for studying wild lizards

2023–2025 **Natural History Museum, University of Nevada, Reno**
Developed two outreach activities on lizard thermal biology, now part of the museum’s events, including the Day at the Museum and the Big Brothers Big Sisters program

2023 **Headwaters Science Institute**
Remote mentor to high school students developing independent research projects

Service & skills

Ad hoc reviewer: *Evolution*, *The American Naturalist*, *Integrative and Comparative Biology*, *Journal of Arid Environments*, *Evolution Letters*, *Journal of Evolutionary Biology*, *Acta Biológica Colombiana*, *Herpetological Review*

Memberships: Society for the Study of Evolution (SSE), Society for Integrative and Comparative Biology (SICB), Society for the Study of Amphibians and Reptiles (SSAR), American Society of Ichthyologists and Herpetologists (ASIH), Herpetologists’ League, Thermal Ecology Alliance

Programming languages: R, Python, Stan, SQL, Bash, Git

Spoken languages: Spanish (native), Catalan (native), English (advanced, C1), French (intermediate, B2), Finnish (beginner, A1)

Academic references

Dr. James T. Stroud, Assistant Professor, School of Biological Sciences, Georgia Institute of Technology

Dr. Michael L. Logan, Associate Professor, Department of Biology, University of Nevada, Reno

Dr. Jenny Ouyang, Associate Professor, Department of Biology, University of Nevada, Reno

Contact details available on request.