



Profile

I am a biologist interested primarily in how ecological and population-level processes drive evolution and speciation. I have extensive experience in evolutionary research, particularly in the generation, analysis and publication of environmental, molecular, and phenotypic data, as well as new species discovery and description. I also have a great deal of expertise in specimen preservation, museum practice, science communication, and teaching.

Personal data

Citizenship: Mexican
Current address: Lexington, KY, USA
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Education

Ph.D.	2021	Australian National University (ANU) , Doctor of Philosophy, Research School of Biology (RSB). Supervisor: Prof. J. Scott Keogh. Thesis: From genes to communities: an integrative approach to the evolution of Varanidae. Achievements: RSB Outstanding Thesis Prize 2021; supported by highly competitive AGRTP scholarship.
M.S.	2015	Facultad de Ciencias, Universidad Nacional Autónoma de México (UNAM) , Master's Degree in Biological Sciences. Supervisor: Prof. Adrián Nieto Montes de Oca. Thesis: Reevaluation of species limits in the skink <i>Plestiodon brevirostris</i> based on multi-locus data. Achievements: "Mención Honorífica", roughly equivalent to <i>cum laude</i> awards; nominated for Alfonso Caso Silver Medal for the best student within each postgraduate program; final grade of 9.89 in a scale of 0 to 10; 5th highest score in the Biological Science Postgraduate Program (Organismal Biology) admission test.
B.S.	2013	Facultad de Ciencias, UNAM , Biology. Supervisor: Prof. Adrián Nieto Montes de Oca. Thesis: Reevaluation of the taxonomic status of a population of <i>Geophis</i> (Squamata: Colubridae) from northern Puebla, Mexico. Achievements: final grade: 9.43 in a scale of 0 to 10
Technical Degree	2008	Centro Educativo ECA , Small Business Administration.

Employment history

Postdoctoral Scholar	2022-	University of Kentucky (UKY). Duties: conduct research on the phylogenomics and evolution of salamandrid salamanders; write research grant proposals; mentor Ph.D. students. Supervisor: Prof. David Weisrock.
Postdoctoral Research Assistant	2021-2022	New York City College of Technology, City University of New York (City Tech). Duties: conduct research on speciation in phrynosomatid lizards from the deserts of North America; mentor an undergraduate student. Supervisor: Prof. Christopher Blair.
Curatorial Technician	2021	Australian National Wildlife Collection, CSIRO. Duties: bird egg collection: replaced cotton and boxes; herpetological collection: replaced ethanol, taxonomically identified specimens, and updated the taxonomic framework used by the collection. Supervisor: Dr. Tonya Haff.
Research Officer	2021	Keogh Lab, ANU. Duties: led research projects on the evolution of monitor lizards. Supervisor: Prof. J. Scott Keogh.
Research Officer	2020-2021	Mulligans Flat-Goorooyarroo Woodland Experiment, ANU. Duties: amphibian and reptile surveys. Supervisor: Jenny Newport.
Research Assistant	2014	Herpetology Lab, “Alfonso L. Herrera” Zoology Museum, Facultad de Ciencias, UNAM. Duties: DNA extraction. Supervisor: Prof. Adrián Nieto Montes de Oca.
Consultant	2013	Outsourcing for PROFEPA. Duties: elaboration of amphibian and reptile identification cards. Supervisor: Prof. Uri O. García Vázquez.
Consultant	2012	Ecoprotec, S.A. de C.V. Duties: biodiversity technical study for the CFE (Sierra Madre del Sur in Guerrero, Mexico). Supervisor: Jesús Soria Díaz.
Consultant	2012	Ecoprotec, S.A. de C.V. Duties: biodiversity technical study for the CFE (Balsas Basin, Guerrero, Mexico). Supervisor: Prof. Jesús Soria Díaz.
Consultant	2012	Ecoprotec, S.A. de C.V. Duties: wildlife rescue for the CFE (Balsas Basin, Morelos, Mexico). Supervisor: Jesús Soria Díaz.

Teaching

Guest Speaker	2022	Molecular Systematics Workshop of the Facultad de Ciencias, UNAM. Species Delimitation. Duties: teach undergraduates about the theory and practice of species delimitation.
Guest Speaker	2021	Research Seminar of the Facultad de Estudios Superiores Zaragoza (FES-Zaragoza). Species Delimitation. Duties: teach undergraduates about the theory and practice of species delimitation.
Casual/Sessional Academic	2019-2 (Semester 2)	ANU. Vertebrate Biology. Duties: organize and moderate group discussion on vertebrate evolution.
Casual/Sessional Academic	2019-1 (Semester 1)	ANU. Biology 1: Evolution, Ecology, and Genetics. Duties: supervise field work; organize and moderate group discussion; grading.
Museum Guide	2019	National Youth Science Forum visit to ANU. The Importance of Natural History Collections. Duties: show a natural history collection to high school students interested in science and talk about its importance.
Casual/Sessional Academic	2018-2	ANU. Vertebrate Biology. Duties: organize and moderate group discussion on vertebrate evolution.
Museum Guide	2018	National Youth Science Forum visit to ANU. The Importance of Natural History Collections. Duties: show a natural history collection to high school students interested in science and talk about its importance.
Casual/Sessional Academic	2017-1	ANU. Biology 1: Evolution, Ecology, and Genetics. Duties: supervise field work; organize and moderate group discussion; grading.
Adjunct Lecturer	2016-2	Facultad de Ciencias, UNAM. Systematics I. Duties: co-instructor of record with one other lecturer.
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Adjunct Lecturer	2014-2	Facultad de Ciencias, UNAM. Systematics I. Duties: co-instructor of record with one other lecturer.

Guest Speaker	2016	VI Certificate in Ecological Restoration of Cloud Forest, INECOL, U.S. Fish and Wildlife Service, ProNatura, NatureServe. Herpetofauna of Mexican Cloud Forests, with Emphasis on the Snakes in the Genus <i>Geophis</i> . Duties: give a talk about the herpetofauna of the Mexican cloud forests, with emphasis on a diverse group of snakes.
Guest Speaker	2015	Course-workshop of Rescue, Handling, and Secure Containment of Snakes of the Valley of Mexico with Conservation Ends, UNAM. Venomous Snakes of the Valley of Mexico in Protected Areas. Duties: teach first responders how to identify venomous snakes in Greater Mexico City.

Mentoring

Undergraduate	2021-2022	City University of New York. Qaantah Rana (co-supervised by Prof. Christopher Blair). Project: Phylogeography, population genomics, and species delimitation of phrynosomatid lizards.
Research Seminar	2021-2022	FES-Zaragoza, UNAM. Samuel Zamora Jacobo (co-supervised by Prof. Uri O. García Vázquez). Project: Systematics and biogeography of <i>Plestiodon lynxe</i> based on morphological and mitochondrial data.

Awards and achievements

2nd best talk in Annual Research & Career Symposium. UKY (2022). 313 AUD.
RSB Outstanding Thesis Prize. ANU (2021). 2,000 AUD.
Incentive Program for Productivity and Performance of the Academic Personnel (PEPASIG). UNAM (2016). 1,000 AUD per annum.
Monetary Award for the Timely Postgraduate Graduation. UNAM (2016). 1,351 AUD.
Nominated for Alfonso Caso Silver Medal (for best student in the Master's Degree in Biological Sciences). UNAM (2015).
Mención Honorífica (M.S.; roughly equivalent to *cum laude* awards). UNAM (2015).
Grade of 9.89 in a scale of 0 to 10 (M.S.). UNAM (2015).
5th highest score in the Biological Science Postgraduate Program (Organismal Biology) admission test. UNAM (2013).
Grade of 9.43 in a scale of 0 to 10 (B.S.). UNAM (2013).

Scholarships

Australian Government Research Training Program (AGRTP) International Fee Offset Scholarship. Australian Government (2017-2020). 34,560 AUD per annum.
AGRTP International Stipend Scholarship. Australian Government (2017-2020). 28,854 AUD per annum.
ANU Higher Degree by Research (HDR) Fee Merit Scholarship. ANU (2017). 34,560 AUD per annum.
University Research Scholarship (International). ANU (2017). 28,854 AUD per annum.
National Master's Scholarship. CONACYT (2013-2015). 5,676 AUD per annum.

Grants

*Principal investigator

- Weisrock, D.W*, **C.J. Pavón-Vázquez***, B.L. Stuart*, S. Phimmachak* & S. Seateun*. 2023. Using a top-down genomic approach to develop a cost-effective molecular toolkit for the conservation of an endangered newt (*Laotriton laoensis*). Revive & Restore and Morris Animal Foundation, Wild Genomes - Amphibians. 304,566 AUD.
- Pavón-Vázquez, C.J.***, & J. Fenker*. 2020 (cancelled due to COVID-19). Australian National Centre for Latin American Studies (ANCLAS) Research Grant. 4,000 AUD.
- Pavón-Vázquez, C.J.*** 2018. Vice-Chancellor's HDR Travel Grant. ANU. 5,000 AUD.
- Pavón-Vázquez, C.J.*** 2018. ACT Herpetological Association (ACTHA) Research Grant. ACTHA. 1,000 AUD.

Publications

High-impact peer-reviewed articles

- Pavón-Vázquez, C.J.**, Q. Rana, K. Farleigh, E. Crispo, M. Zeng, J. Lillah, D. Mulcahy, A. Ascanio, T. Jezkova, A.D. Leaché, T. Flouri, Z. Yang & C. Blair. Gene flow and isolation in the arid Nearctic revealed by genomic analyses of desert spiny lizards. *Systematic Biology* (submitted).
- Everson, K.M., L. Pozzi, M.A. Barrett, M.E. Blair, M.E. Donohue, P.M. Kappeler, A.C. Kitchener, A.R. Lemmon, E.M. Lemmon, **C.J. Pavón-Vázquez**, U. Radespiel, B. Randrianambinina, R.M. Rasoloarison, S. Rasoloharijaona, C. Roos, J. Salmona, A.D. Yoder, R. Zenil-Ferguson, D. Zinner & D.W. Weisrock. Not one, but multiple radiations underlie the biodiversity of Madagascar's endangered lemurs. *Science* (submitted).
- Pavón-Vázquez, C.J.**, I.G. Brennan, A. Skeels & J.S. Keogh. 2022. Competition and geography underlie speciation and morphological evolution in Indo-Australasian monitor lizards. *Evolution* 76: 476-495.
- Pavón-Vázquez, C.J.**, D. Esquerré, A.J. Fitch, P. Doughty, S.C. Donnellan & J.S. Keogh. 2022. Between a rock and a dry place: phylogenomics, biogeography, and systematics of ridge-tailed monitors (Squamata: Varanidae: *Varanus acanthurus* complex). *Molecular Phylogenetics and Evolution* 173: 107516.
- Pavón-Vázquez, C.J.**, D. Esquerré & J.S. Keogh. 2022. Ontogenetic drivers of morphological evolution in monitor lizards and allies (Squamata: Paleanguimorpha), a clade with extreme body size disparity. *BMC Ecology and Evolution* 22: 15.
- Esquerré, D., S.C. Donnellan, **C.J. Pavón-Vázquez**, J. Fenker & J.S. Keogh. 2021. Phylogeography, historical demography and systematics of the world's smallest pythons (Pythonidae, *Antaresia*). *Molecular Phylogenetics and Evolution* 161: 107181.
- Melville, J., D.G. Chapple, J.S. Keogh, J. Sumner, A. Amey, P. Bowles, I.G. Brennan, P. Couper, S. Donnellan, P. Doughty, D. Edwards, R.J. Ellis, D. Esquerré, J. Fenker, M.G. Gardner, A. Georges, M. Haines, C.J. Hoskin, M. Hutchinson, C. Moritz, J. Nankivell, P. Oliver, **C.J. Pavón-Vázquez**, M. Pepper, D.L. Rabosky, K. Sanders, G. Shea, S. Singhal, J. Worthington Wilmer & R. Tingley. 2021. A return-on-investment approach for prioritization of rigorous taxonomic research needed to inform responses to the biodiversity crisis. *PLOS Biology* 19: e3001210.
- Pavón-Vázquez, C.J.**, I.G. Brennan & J.S. Keogh. 2021. A comprehensive approach to detect hybridization sheds light on the evolution of Earth's largest lizards. *Systematic Biology* 70: 877-890.

Gray, L.N., A.J. Barley, D.M. Hillis, **C.J. Pavón-Vázquez**, S. Poe & B.A. White. 2020. Does breeding season variation affect evolution of a sexual signaling trait in a tropical lizard clade? *Ecology and Evolution* 10: 3738–3746.

Esquerré, D., D. Ramirez-Álvarez, **C.J. Pavón-Vázquez**, J. Troncoso-Palacios, C.F. Garín, J.S. Keogh & A.D. Leaché. 2019. Speciation across mountains: phylogenomics, species delimitation and taxonomy of the *Liolaemus leopardinus* clade (Squamata, Liolaemidae). *Molecular Phylogenetics and Evolution* 139: 106524.

García-Vázquez, U.O., A. Nieto-Montes de Oca, R.W. Bryson Jr., W. Schmidt-Ballardo & **C.J. Pavón-Vázquez**. 2018. Molecular systematics and historical biogeography of the genus *Gerrhonotus* (Squamata: Anguinae). *Journal of Biogeography* 45: 1640–1652.

Pavón-Vázquez, C.J., U.O. García-Vázquez, R.W. Bryson, Jr., M. Feria-Ortiz, N.L. Manríquez-Morán & A. Nieto-Montes de Oca. 2018. Integrative species delimitation in practice: revealing cryptic lineages within the short-nosed skink *Plestiodon brevirostris* (Squamata: Scincidae). *Molecular Phylogenetics and Evolution* 129: 242–257.

Bryson, Jr., R.W., C.W. Linkem, **C.J. Pavón-Vázquez**, A. Nieto-Montes de Oca, J. Klicka & J.E. McCormack. 2017. A phylogenomic perspective on the biogeography of skinks in the *Plestiodon brevirostris* group inferred from target enrichment of ultraconserved elements. *Journal of Biogeography* 44: 2033–2044.

Other peer-reviewed articles

Feria-Ortiz, M., U.O. García-Vázquez, **C.J. Pavón-Vázquez** & A. Nieto-Montes de Oca. Reproductive traits and change in body shape of neonates in the oak forest skink, *Plestiodon lynxe*. *Acta Zoologica* (in press).

Barragán-Reséndiz, L.M., **C.J. Pavón-Vázquez**, L. Canseco-Márquez, R.I. Cervantes-Burgos, M. Trujano-Ortega & U.O. García-Vázquez. 2022. A new species of snake of the *Geophis sieboldi* group (Squamata: Dipsadidae) from Estado de México, Mexico. *Herpetologica* 78: 268–276.

García-Vázquez, U.O., **C.J. Pavón-Vázquez**, M. Feria Ortiz & A. Nieto-Montes de Oca. 2021. A new species of blue-tailed skink (Scincidae: *Plestiodon*) from the Sierra Madre del Sur, Mexico. *Herpetologica* 77: 85–93.

García-Vázquez, U.O., **C.J. Pavón-Vázquez**, J.C. Blancas-Hernández, E. Blancas-Calva & E. Centenero-Alcalá. 2018. A new rare species of the *Rhadinaea decorata* group (Squamata, Colubridae) from the Sierra Madre del Sur of Guerrero, Mexico. *ZooKeys* 780: 137–154.

Pavón-Vázquez, C.J., A. Nieto-Montes de Oca, A.A. Mendoza-Hernández, E. Centenero-Alcalá, S.A. Santa Cruz-Padilla & V.H. Jiménez-Arcos. 2017. A new species of *Plestiodon* (Squamata: Scincidae) from the Balsas Basin, Mexico. *Zootaxa* 4365: 149–172.

Canseco-Márquez, L., **C.J. Pavón-Vázquez**, M.A. López-Luna & A. Nieto-Montes de Oca. 2016. A new species of earth snake (Dipsadidae, *Geophis*) from Mexico. *ZooKeys* 610: 131–145.

Clause, A.G., **C.J. Pavón-Vázquez**, P.A. Scott, C.C. Murphy, E.W. Schaad & L.N. Gray. 2016. Identification uncertainty and proposed best-practices for documenting herpetofaunal geographic distributions, with applied examples from southern Mexico. *Mesoamerican Herpetology* 3: 977–1000.

Pavón-Vázquez, C.J., I. Solano-Zavaleta & L.N. Gray. 2014. Morphological variation and natural history of *Anolis duellmani* (Squamata: Dactyloidae). *Mesoamerican Herpetology* 1: 146–153.

Pavón-Vázquez, C.J., L. Canseco-Márquez & A. Nieto-Montes de Oca. 2013. A new species in the *Geophis dubius* group (Squamata: Colubridae) from northern Puebla, México. *Herpetologica* 69: 358–370.

Pavón-Vázquez, C.J., U.O. García-Vázquez, J.C. Blancas-Hernández & A. Nieto-Montes de Oca. 2011. A new species of the *Geophis sieboldi* Group (Squamata: Colubridae) exhibiting color pattern polymorphism from Guerrero, Mexico. *Herpetologica* 67: 332–343.

Chapters in books

Meza-Lázaro, R.N. & **C.J. Pavón-Vázquez**. 2018. Heterogeneidad del Patrón de Sustitución: Elección entre Estrategias de Partición mediante Modelos Mixtos y Análisis de Modelos Mezclados usando Salto Reversible. In: Mata López, R., A.N. Castañeda Sortibrán, E.A. García Trejo, M.B.I. Honey Escandón, M.B. Mendoza Garfias & I.P. Cervantes Aguilar (eds.). *Sistemática Molecular y Bioinformática. Guía práctica*. Las Prensas de Ciencias, Facultad de Ciencias, UNAM, Mexico, pp. 178–182.

Preprints

Everson, K.M., L. Pozzi, M.A. Barrett, M.E. Blair, M.E. Donohue, P.M. Kappeler, A.C. Kitchener, A.R. Lemmon, E.M. Lemmon, **C.J. Pavón-Vázquez**, U. Radespiel, B. Randrianambinina, R.M. Rasoloarison, S. Rasoloharijaona, C. Roos, J. Salmona, A.D. Yoder, R. Zenil-Ferguson, D. Zinner & D.W. Weisrock. 2023. Not one, but multiple radiations underlie the biodiversity of Madagascar's endangered lemurs. *bioRxiv* 2023.04.26.537867.

Gray, L.N., A.J. Barley, D.M. Hillis, **C.J. Pavón-Vázquez**, S. Poe & B.A. White. 2019. Does breeding season variation affect evolution of a sexual signaling trait in a tropical lizard clade? *bioRxiv* 864132.

Peer-reviewed notes

Peralta-Hernández, R., & **C.J. Pavón-Vázquez**. 2022. Nota de distribución. *Geophis blanchardi* (Colubridae). *Revista Latinoamericana de Herpetología* 5: 49–50.

White, B.A., L.N. Gray, **C.J. Pavón-Vázquez**, & U.O. García-Vázquez. *Triprion (Anothea) spinosus*. *Phragmosis. Herpetological Review* 53: 481.

Loc-Barragán, J.A., C.I. Grünwald, U.O. García-Vázquez & **C.J. Pavón-Vázquez**. 2020. Nota de distribución. *Plestiodon parviauriculatus* (Squamata: Scincidae). *Revista Latinoamericana de Herpetología* 3: 126.

Pavón-Vázquez, C.J., O. Jiménez-Robles, M. Arvizu-Meza & D. Dashevsky. 2020. Geographic Distribution. *Cacophis squamulosus*. *Herpetological Review* 51: 543.

Sánchez-García, J.C., **C.J. Pavón-Vázquez**, L. Canseco-Márquez, J. Cruzado-Cortés & U.O. García-Vázquez. 2019. New records and morphological variation of *Rhadinaea marcellae* Taylor, 1949 (Squamata, Colubridae) from Sierra Madre Oriental, México. *Check List* 15: 729–733.

Valdenegro-Brito, A.E., **C.J. Pavón-Vázquez**, R. Luna-Reyes & U.O. García-Vázquez. 2018. Distribución geográfica de *Scincella incerta* (Squamata: Scincidae) en el estado de Chiapas, México. *Acta Zoológica Mexicana (nueva serie)* 34: e3412140.

White, B.A., L.N. Gray, **C.J. Pavón-Vázquez**, U.O. García-Vázquez & A.S. Harrison. 2018. Natural History Notes. *Thamnophis proximus* (Western Ribbonsnake). Defensive behavior. *Herpetological Review* 49: 356-357.

García-Vázquez, U.O., J.C. Sánchez-García, L.N. Gray, B.A. White, R.W. Hansen & **C.J. Pavón-Vázquez**. 2017. Geographic Distribution. *Lampropeltis mexicana*. *Herpetological Review* 48: 128.

Pavón-Vázquez, C.J., M. Trujano-Ortega, A. Arellano-Covarrubias & U.O. García-Vázquez. 2017. Geographic Distribution. *Barisia ciliaris*. *Herpetological Review* 48: 388.

Šmek, P., P. Uetz & **C.J. Pavón-Vázquez**. 2017. Distribution Notes. Range extension of *Mesoscincus managuae* (Dunn, 1933) in Guatemala. *Mesoamerican Herpetology* 4: 955-958.

White, B.A., L.N. Gray, **C.J. Pavón-Vázquez**, U.O. García-Vázquez & A.S. Harrison. 2017. Natural History Notes. *Aristelliger georgeensis* (Saint George Island Gecko). Diet. *Herpetological Review* 48: 637.

Pavón-Vázquez, C.J., M. Trujano-Ortega, A. Arellano Covarrubias & U.O. García-Vázquez. 2016. Nature Notes. *Anolis tropidonotus* Peters 1863. Reproduction. *Mesoamerican Herpetology* 3: 479-480.

Pavón-Vázquez, C.J., L.N. Gray, B.A. White, U.O. García-Vázquez & A.S. Harrison. 2016. Distribution Notes. First records for Cozumel Island, Quintana Roo, Mexico: *Eleutherodactylus planirostris* (Anura: Eleutherodactylidae), *Trachycephalus typhonius* (Anura: Hylidae), and *Indotyphlops braminus* (Squamata: Typhlopidae). *Mesoamerican Herpetology* 3: 531-533.

Pavón-Vázquez, C.J., L.N. Gray, B.A. White & A.S. Harrison. 2016. Nature Notes. *Boa imperator* Daudin 1803. Diet. *Mesoamerican Herpetology* 3: 490-492.

Pavón-Vázquez, C.J. & M. Arvizu-Meza. 2016. Nature Notes. *Phrynosoma braconnieri* Duméril & Bocourt, 1870. Behavior. *Mesoamerican Herpetology* 3: 726.

Pavón-Vázquez, C.J., I.P. Maayan, B.A. White & A.S. Harrison. 2016. Distribution Notes. Three noteworthy herpetofaunal records from Belize. *Mesoamerican Herpetology* 3: 780-782.

Pavón-Vázquez, C.J., M. Arvizu-Meza & U.O. García-Vázquez. 2015. Nature Notes. *Aquiloerycea cephalica* (Cope, 1865). Size and natural history. *Mesoamerican Herpetology* 2: 515-517.

Pavón-Vázquez, C.J., U.O. García-Vázquez, R.N. Meza-Lázaro & A. Nieto-Montes de Oca. 2015. Distribution Notes. First record of the coral snake, *Micrurus nebularis* Roze 1989, from the state of Puebla, Mexico. *Mesoamerican Herpetology* 2: 131-133.

Pavón-Vázquez, C.J., A. Arellano Covarrubias & U.O. García-Vázquez. 2014. Geographic Distribution. *Hyalinobatrachium fleischmanni*. *Herpetological Review* 45: 654.

Solano-Zavaleta, I., **C.J. Pavón-Vázquez**, G. Campillo-García, J.C. Arenas-Monroy, E. Pérez-Ramos, E. Centenero-Alcalá, J.J. Avendaño-Pazos & A. Nieto-Montes de Oca. 2014. Distribution Notes. New record and comments on the distribution of the Mexican colubrid snake *Coniophanes melanocephalus* (Peters, 1869). *Mesoamerican Herpetology* 1: 295-298.

Electronic publications

Pavón-Vázquez, C.J. 2022. From pocket lizards to mighty dragons: evolution of growth patterns in monitor lizards. *Nature Ecology and Evolution: Behind the Paper*.

Pavón-Vázquez, E.A., & **C.J. Pavón-Vázquez**. 2019. SeATTLE: Sequence Alignment Transformation into a Table for Later Edition (<https://github.com/CarlosPavonV/seattle>).

Co-built the Windows executable of the iBPP software for integrative species delimitation (<https://github.com/cecileane/iBPP/blob/master/man/winexe.md>).

Pavón-Vázquez, C.J. 2014. Finding the “Rare” *Anolis duellmani*. *Anole Annals*.

Weekly contribution in Flavours, electronic journal of fashion and ecological design (2015).

Invited talks

*Presenting author

Pavón-Vázquez, C.J.* 2023. Scaly Science Teachers: Evolutionary Lessons from Giant Carnivorous Lizards. Teacher Institute for Evolutionary Science.

Pavón-Vázquez, C.J.* 2022. Exploring the Continuum between Micro and Macroevolution in Monitor Lizards. Comparative Biology Seminar Series, American Museum of Natural History.

Pavón-Vázquez, C.J.* 2021. An Integral View Of Biodiversity and its Origins. City Tech.

Pavón-Vázquez, C.J.*, & J. Fenker*. 2019. Evolutionary Lessons from the Lizard Radiations of Australia and the Neotropics. ANU Latin American Students’ Association.

Pavón-Vázquez, C.J.* 2019. Monitor Lizards: Evolution and Biogeography. ACT Herpetological Association.

Pavón-Vázquez, C.J.* 2017. Into the Lair of the Feathered Serpent: Mexican Herpetofauna. ACT Herpetological Association.

Meza-Lázaro, R.N., & **C.J. Pavón-Vázquez***. 2015. Heterogeneity in Substitution Models: Selecting between Partition Strategies Using Mixed Models and Admixture Models by means of rjMCMC. Practical Tools for Teaching in Molecular Systematics and Bioinformatics, UNAM.

Pavón-Vázquez, C.J.* 2015. Spiders. Colegio Alemán Alexander von Humboldt.

García-Vázquez, U.O.*, & **C.J. Pavón-Vázquez***. 2015. Generalities of the Amphibians and Reptiles of Mexico. Colegio Regina.

Other talks

*Presenting author

**Award-winning talk

Pavón-Vázquez, C.J.* 2023. Interactions Matter: Inter-Specific Competition and the Diversification of Indo-Australasian Monitor Lizards. 2023 SSB 5th Standalone Meeting.

Pavón-Vázquez, C.J.*, Y. Wu, J. Che, Z. Yuan, T.J. Papenfuss, B.L. Stuart, A.D. Yoder, A.R. Lemmon, E.M. Lemmon & D.W. Weisrock. 2023. Phylogenomics of salamandrid salamanders: a tale of parallel radiations and flexible life cycles. *Evolution*.

Everson, K.M.*, L. Pozzi, M.A. Barrett, M.E. Blair, M.E. Donohue, P.M. Kappeler, A.C. Kitchener, A.R. Lemmon, E.M. Lemmon, **C.J. Pavón-Vázquez**, U. Radespiel, B. Randrianambinina, R.M. Rasoloarison, S. Rasoloharijaona, C. Roos, J. Salmona, A.D. Yoder, R. Zenil-Ferguson, D. Zinner & D.W. Weisrock. 2023. Not one, but multiple radiations underlie the biodiversity of Madagascar’s endangered lemurs. *Evolution*.

****Pavón-Vázquez, C.J.*** 2022. Giant Lizards Shed Light into the Origins of Biodiversity. Annual Research & Career Symposium, Society of Postdoctoral Scholars at the University of Kentucky. 2nd place.

- Pavón-Vázquez, C.J.*** 2022. Microevolution and Macroevolution of Earth's Largest Lizards. XXV Congreso Nacional de Zoología.
- Pavón-Vázquez, C.J.***, I.G. Brennan & J.S. Keogh. 2020. Evidence for Ancient Hybridization between the Komodo Dragon and Australian Monitor Lizards. 9th World Congress of Herpetology.
- Pavón-Vázquez, C.J.***, I.G. Brennan & J.S. Keogh. 2019. Confirming the Australian Origin of the Komodo Dragon and Revealing Ancient Gene Flow with Australian Monitor Lizards through an Integrative Approach. Australasian Evolution Society Meeting 2019.
- Pavón-Vázquez, C.J.***, D. Esquerré & J.S. Keogh. 2019. Evolutionary Lability of Ontogeny Underlies Phenotypic Diversity in Monitor Lizards. 2019 Boden Research Conference: Evolutionary Transformations in Vertebrate History.
- Pavón-Vázquez, C.J.***, D. Esquerré & J.S. Keogh. 2019. The Evolution of Ontogeny in a Lizard Family containing Dwarf And Giant Species (Varanidae). Evolution.
- Pavón-Vázquez, C.J.***, D. Esquerré & J.S. Keogh. 2018. From Childhood to Dragonhood: the Evolution of Ontogeny in Monitor Lizards and their Kin. Joint Meeting of the ASH and SRARNZ.
- Bryson, Jr., R.W., C.W. Linkem, **C.J. Pavón-Vázquez***, A. Nieto-Montes de Oca, J. Klicka & J.E. McCormack. 2017. Of Volcanoes and Lizards—Phylogenomics and Biogeography in a Group of Mexican Skinks. Systematics 2017—Integrating Systematics for Conservation and Ecology.
- Donnellan S.C., G.H. Openshaw, M.R. Pepper, **C.J. Pavón-Vázquez***, & J.S. Keogh. 2017. Similarities and Differences in Phylogeographic Patterns between Two Clades of Monitor Lizards (poster). Systematics 2017—Integrating Systematics for Conservation and Ecology.
- Pavón-Vázquez, C.J.***, & A. Nieto-Montes de Oca. 2017. Hiding above the Clouds: Pseudocryptic Speciation in the Mountain-dwelling Shortnose Skink *Plestiodon brevirostris*. 45th ASH Conference.
- Perea-Pérez, A.*, **C.J. Pavón-Vázquez** & U.O. García-Vázquez. 2016. Species Limits in *Scincella silvicola* (Squamata: Scincidae) (poster). XIV Reunión Nacional de Herpetología.
- Valdenegro-Brito, A.E.*, **C.J. Pavón-Vázquez** & U.O. García-Vázquez. 2016. Updated Knowledge of the Distribution of the Genus *Scincella* (Squamata: Scincidae) in Chiapas (poster). XIV Reunión Nacional de Herpetología.

Professional development

Fundamentals of Funding, UKY (2022)

Bayesian Phylogenetics and Macroevolution in RevBayes, Centre for Biodiversity Analysis (CBA) (2019)

Landscape Genomics Symposium, CBA (2019)

Model-based Species Delimitation Workshop, CBA (2019)

Biology Demonstrator Training, ANU (2019)

Analysis of SNP Data from Reduced Representation Sequencing, University of Canberra (2018)

Introduction to Nature Photography, ANU (2018)

Phylogenomics Workshop using IQ-TREE, CBA (2018)

SNPs in Population- and Phylo-genomics, CBA (2018)

Genomics and Collections: Adaptation to Macroevolution, CSIRO Discovery, ACT (2017)

Gekkota Mundi, Western Australia (2017)

First Aid Training, ANU (2017)

Demystifying Linux - Using The Unix Shell, ANU (2017)

Introduction to Data Processing in R, ANU (2017)

Professor Brian Schmidt Shares His Philosophy of Teaching and Learning, ANU (2017)

Wiley's Keys for Publishing a Successful Paper, UNAM (2016)

Hemipenial Architecture Workshop: Eversion Techniques and Basic Anatomy, UNAM (2016)

Major Transitions in Evolution, UNAM (2015)
Conservation of Mexican *Abronia* forum, UNAM (2015)
Selected Subjects of Medicine and Zoo-Technology of Poultry: Origin of Birds, UNAM (2012)

Languages

Spanish. Native speaker.

English. 14 years of study.

TOEFL iBT (2016): 110 total score (30 Reading, 30 Listening, 24 Speaking, and 26 Writing)

TOEFL ITP (2007): 670 total score (scaled scores: 68 Listening Comprehension, 68 Structure and Written Expression, and 65 Reading Comprehension)

PET (2005): Pass, Level B1 (exceptional Reading and Listening)

Computer skills

3D architectural modeling and rendering in **Artlantis** and **ArchiCAD**

Experience in the handling of **word processors and spreadsheets**

Management of the tissue, DNA extraction, and primer databases of the Laboratorio de Herpetología, Museo de Zoología Alfonso L. Herrera, Facultad de Ciencias, UNAM, Mexico

Website construction in **Squarespace**, **Weebly**, and **WordPress**

Experience with several software packages for **analysis of biological data**

Experience in scientific illustration with **Illustrator**, **Inkscape**, and **Photoshop**

Experience with **Bash**, **R**, and **cluster computing**

Experience with **Geographic Information Systems**

Field work

Vast experience doing **ecological and taxonomic surveys** in Australia, Belize, and Mexico

Self-funded field trips for **wildlife photography** in all Australian states, except TAS

Experience in the **sampling of vertebrates and arthropods**

GPS usage

Manual and four-wheel driving (Mexican driving license)

Memberships

*By invitation

**By application

****Mexican National System of Researchers** (2023–2026). A prestigious network of Mexican scientists. Level: Candidate.

***IUCN Skink Specialist Group** (2021–present). Group in charge of assessing the conservation status of the world's skinks. We also perform collaborative research on skink diversity, ecology, and evolution.

Society of Systematic Biologists (2021–present).

Society for the Study of Evolution (2017–present).

ACT Herpetological Association (2017).

Service to field

Associate Editor. Boletín Chileno de Herpetología (2023–); The Herpetological Journal (2022–)

Referee. Have reviewed manuscripts for the following journals: Austral Ecology, Biological Journal of the Linnean Society, Boletín Chileno de Herpetología, Caldasia, Canadian Journal of Zoology, Check List, Elsevier (book proposal), Evolution (digest), Evolution Letters, Journal of Biogeography, Herpetologica (group review), Herpetology Notes (pre-peer review), Molecular Ecology (group review), Molecular Phylogenetics and Evolution, Phyllomedusa, Revista Latinoamericana de Herpetología, Scientific Reports, Systematic Biology, and ZooKeys.

Conference organizer. Becoming a World-Leading Researcher as a Latin American Woman. ANU (2020; cancelled due to COVID-19)

Student talk judge. 9th World Congress of Herpetology (2020)

Invited assistant. Institutional visit of UNAM to ANU (2019)

Judge. Science Educators' Association of the ACT Science and Engineering Fair (2017, 2019)

Outreach and media appearances

Biology of Mexican Herps. Blog on the ecology, evolution, and conservation of Mexican amphibians and reptiles. Founding member, administrator, and contributor (2018-present; <https://biomh.wordpress.com>).

Interviews. The Guardian (2021): shorturl.at/fsxP4
Australian Geographic (2021): shorturl.at/pr239
SBS Spanish (2021-2023): shorturl.at/psIKZ; shorturl.at/mnzFO;
shorturl.at/mnyDG; shorturl.at/aclmR
Rolling Up Science (2019): shorturl.at/aeO68

Sci-comm. Nature Ecology and Evolution: Behind the Paper (2022): shorturl.at/mtKT4

Phys.org (2016): shorturl.at/HKUZ6

Anole Annals (2014): shorturl.at/nMV19

Featured as Outstanding Mexican Down Under. Newsletter of the Embassy of Mexico in Australia (2017)