

CV Date	19/06/2024
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Part A. PERSONAL INFORMATION

First Name	Rodrigo		
Family Name	Megía Palma		
Sex	Not Specified	Date of Birth	
ID number Social Security, Passport			
URL Web	https://rodrigomegia.wixsite.com/parasite		
Email Address			
Open Researcher and Contributor ID (ORCID)	0000-0003-1038-0468		

A.1. Current position

Job Title	Profesor Ayudante Doctor		
Starting date	2021		
Institution	Universidad de Alcalá		
Department / Centre	Biomedicina y Biotecnología / Farmacia		
Country		Phone Number	
Keywords	Climate change; Evolutionary biology; Functional biology; Biodiversity		

Part B. CV SUMMARY

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- Scientific paper.** (1/13) Rodrigo Megía-Palma (AC); Jose J. Cuervo; Patrick S. Fitze; et al; Santiago Merino. 2024. Do sexual differences in life strategies make male lizards more susceptible to parasite infection?. *Journal of Animal Ecology*. Wiley.
- Scientific paper.** Edward Gilbert; Anamarija Zagar; Marta López-Darias; et al; Katharina Wollenberg-Valero; (4/10) Rodrigo Megía-Palma. 2024. Environmental factors influence cross-talk between a heat shock protein and an oxidative stress protein modification in the lizard *Gallotia galloti*. *Plos One*. Plos.org. 19-3, pp.e0300111.
- Scientific paper.** (1/5) Megía-Palma, R. (AC); Paranjpe, D.; Cooper, R.; Blaimont, P.; Sinervo, B. 2024. Natural parasites in conjunction with behavioral and color traits explain male agonistic behaviors in a lizard. *Current Zoology*. 70-1, pp.59-69. Google Scholar (2)
- Scientific paper.** (1/10) Rodrigo Megía-Palma (AC); Gemma Palomar; Javier Martínez; et al; Santiago Merino. 2024. Lizard host abundances and climatic factors explain phylogenetic diversity and prevalence of blood parasites on an oceanic island. *Molecular Ecology*. Wiley. 2024-33, pp.e17276.
- Scientific paper.** Serén, N.; (2/8) Megía-Palma, R.; Simcic, T.; Krofel, M.; Guarino, F.M.; Pinho, C.; Zagar, C.; Carretero, M.A. 2023. Functional responses in a lizard along a 3.5-km altitudinal gradient. *Journal of Biogeography*. Wiley.
- Scientific paper.** (1/4) Megía-Palma, R. (AC); Redondo, L.; Blázquez-Castro, S.; Barrientos, R. 2023. Differential recovery ability from infections by two blood parasite genera in males of a Mediterranean lacertid lizard after an experimental translocation. *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology*. 339-9, pp.816-824. Google Scholar (1)

- 7 **Scientific paper.** (1/9) Megía-Palma, R. (AC); Martínez, J.; Fitze, P.; et al; Merino, S.2023. Genetic diversity, phylogenetic position, and co-phylogenetic relationships of Karyolysus, a common blood parasite of lizards in the western Mediterranean. *International Journal for Parasitology. Science Direct.* 53-4, pp.185-196. Google Scholar (4)
- 8 **Scientific paper.** (1/3) Megía-Palma, R. (AC); Merino, S.; Barrientos, R.2022. Longitudinal effects of habitat quality, body condition, and parasites on colour patches of a multiornamented lizard. *Behavioral Ecology and Sociobiology.* 76-6, pp.73. Google Scholar (7)
- 9 **Scientific paper.** (1/3) Megía-Palma, R. (AC); Barja, I.; Barrientos, R.2022. Fecal glucocorticoid metabolites and ectoparasites as biomarkers of heat stress close to roads in a Mediterranean lizard. *Science of the Total Environment.* 149919. Google Scholar (12)
- 10 **Scientific paper.** (1/5) Megía-Palma, R. (AC); Barrientos, R.; Gallardo, M.; Martínez, J.; Merino, S.2021. Brighter is darker: the Hamilton–Zuk hypothesis revisited in lizards. *Biological Journal of the Linnean Society.* 134-2, pp.461-473. Google Scholar (8)
- 11 **Scientific paper.** (1/7) Megía-Palma, R. (AC); Arregui, L.; Pozo, I.; Zagar, A.; Serén, N.; Carretero, M.A.; Merino, S.2020. Geographic patterns of stress in insular lizards reveal anthropogenic and climatic signatures. *Science of the Total Environment.* 749-2020, pp.1-10. Google Scholar (25)
- 12 **Scientific paper.** (1/11) Megía-Palma, R. (AC); Martínez, J.; Cuervo, J.J.; et al; Merino, S.2018. Molecular evidence for host-parasite co-speciation between lizards and Schellackia parasites. *International Journal for Parasitology.* 48-9-10, pp.709-718. Google Scholar (27)
- 13 **Scientific paper.** Megía-Palma, R.; Martínez, J.; Merino, S.2018. Manipulation of parasite load induces significant changes in the structural-based throat color of male Iberian green lizards. *Current Zoology.* 64-3, pp.293-302. Google Scholar (24)
- 14 **Scientific paper.** Álvarez, L.; (2/7) Megía-Palma, R.; Reguera, S.; Ruiz, S.; Zomora-Camacho, F.; Figuerola, J.; Moreno-Rueda, G.2018. Opposed elevational variation in prevalence and intensity of endoparasites and their vectors in a lizard. *Current Zoology.* 64-2, pp.197-204. Google Scholar (37)
- 15 **Scientific paper.** (1/10) Megía-Palma, R. (AC); Martínez, J.; Paranjpe, D.; et al; Merino, S.2017. Phylogenetic analyses reveal that Schellackia parasites (Apicomplexa) detected in American lizards are closely related to the genus Lankesterella: is the range of Schellackia restricted to Old World?. *Parasites & Vectors.* 10-470. Google Scholar (20)
- 16 **Scientific paper.** Carmen Duque-Amado; (2/2) Rodrigo Megía-Palma. 2024. The Mesoamerican giant toad (*Rhinella horribilis*) as bioindicator of vegetation degradation in a tropical forest. *Basic and Applied Herpetology. Asociación Herpetológica Española.*
- 17 **Scientific paper.** Prem Aguilar 1; Guillem Pérez-i-de-Lanuza 2; Helena Martínez-Gil 3; Urbam Dajcman 4; Tatjana Simčić 5; Catarina Pinho 6; Anamarija Zagar 7; (8/8) Rodrigo Megía-Palma 8. 2024. Color morphs of the fire salamander are discriminated at night by conspecifics and predators. *Journal of Zoology. Zoological Society of London.* 322-2, pp.141-155.
- 18 **Scientific paper.** Jimena Rivera-Rea; Juan Carlos González-Morales; (3/6) Rodrigo Megía-Palma; Elizabeth Bastiaans; Erendina Quintana; Javeir Manjarrez. 2024. Seasonal changes in color patches and parasite load of male torquate lizards (*Sceloporus torquatus*). *Behavioral Ecology and Sociobiology. Springer.* 78-27.
- 19 **Scientific paper.** Roca, V.; Gomez-Ramirez, F.; Espasandín, I.; Megía-Palma, R.; Perera, A.; Fernando Martínez-Freiría. 2023. First helminthological data on the Iberian adder, *Vipera seoanei*. *Parasitology Research.* 122, pp.1499-1507.
- 20 **Scientific paper.** Blázquez-Castro, S.; Barrientos, R.; (3/3) Megía-Palma, R.2023. Unusual double erythrocyte infection by heterogeneric parasites in the lacertid lizard *Psammotromus algirus* (Linnaeus, 1758). *Herpetology Notes. European Society of Herpetology.* 16, pp.669-672.
- 21 **Scientific paper.** Žagar, A.; Simčić, T.; Dajčman, U.; (4/4) Megía-Palma, R.2022. Parasitemia and elevation as predictors of hemoglobin concentration and antioxidant capacity in two sympatric lizards. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology.* 270, pp.11233. Google Scholar (2)

- 22 Scientific paper.** Van Niekerk, J.; (2/3) Megía-Palma, R.; Forcina, G.2022. Thermoregulatory function and sexual dimorphism of the throat sack in Helmeted Guineafowl (*Numida meleagris*) across Africa. *Avian Research*. 13, pp.100047. Google Scholar (3)
- 23 Scientific paper.** Rivera, J.; González-Morales, J.C.; Fajardo, V.; (4/6) Megía-Palma, R.; Bastiaans, E.; Manjarrez, J.2022. Phenological variation in parasite load and inflammatory response in a lizard with an asynchronous reproductive cycle. *The Science of Nature*. 109-4, pp.1-8. Google Scholar (3)
- 24 Scientific paper.** Dajcman, U.; Carretero, M.A.; Megía-Palma, R.; Perera, A.; Kostanjšek, R.; Zagar, A.2021. Shared haemogregarine infections in competing lacertids. *Parasitology*. 149-2, pp.193-202. Google Scholar (4)
- 25 Scientific paper.** Drechsler, R.M.; Belliure, J.; (3/3) Megía-Palma, R.2021. Phenological and intrinsic predictors of mite and haemacoccidian infection dynamics in a Mediterranean community of lizards. *Parasitology*. 148-11, pp.1328-1338. Google Scholar (11)
- 26 Scientific paper.** Rutschmann, A.; Dupoué, A.; Miles, D.; et al; Le Galliard, J.F.; (4/13) Megía-Palma, R.2021. Intense nocturnal warming alters growth strategies, colouration and parasite load in a diurnal lizard. *Journal of Animal Ecology*. 90-8, pp.1864-1877. Google Scholar (9)
- 27 Scientific paper.** Barrientos, R.; (2/2) Megía-Palma, R. (AC). 2021. Associated costs of mitigation-driven translocation in small lizards. *Amphibia-Reptilia*. 42-3, pp.275-282. Google Scholar (9)
- 28 Scientific paper.** Van Niekerk, J.; (2/3) Megía-Palma, R.; Forcina, G.2021. Call variation of Crested Francolin (*Dendroperdix sephaena*) across Africa defies the effects of spatial gradients. *Ibis: International Journal of Avian Science*. Wiley Online Library. pp.1-16. Google Scholar (1) <https://doi.org/10.1111/ibi.12945>
- 29 Scientific paper.** (1/4) Megía-Palma, R. (AC); Jiménez-Robles, O.; Hernández-Agüero, J.A.; de la Riva, I.2020. Plasticity of haemoglobin concentration and thermoregulation in a mountain lizard. *Journal of Thermal Biology*. 92, pp.102656. Google Scholar (12)
- 30 Scientific paper.** (1/5) Megía-Palma, R. (AC); Paranjpe, D.; Blaimont, P.; Cooper, R.; Sinervo, B.2020. To cool or not to cool? Intestinal coccidians disrupt the behavioral hypothermia of lizards in response to tick infestation. *Ticks and tick-borne diseases*. 11-1, pp.101275. Google Scholar (25)
- 31 Scientific paper.** (1/3) Megía-Palma, R. (AC); Jorge, A.; Reguera, S.2018. Raman spectroscopy reveals the presence of both eumelanin and pheomelanin in the skin of lacertids. *Journal of Herpetology*. 52-1, pp.67-73. Google Scholar (12)
- 32 Scientific paper.** (1/8) Megía-Palma, R. (AC); Paranjpe, D.; Reguera, S.; Martínez, J.; Cooper, R.; Blaimont, P.; Merino, S.; Sinervo, B.2018. Multiple color patches and parasites in *Sceloporus occidentalis*: Differential relationships by sex and infection. *Current Zoology*. 64-6, pp.703-711. Google Scholar (14)
- 33 Scientific paper.** García-Roa, R.; (2/6) Megía-Palma, R.; Ortega, J.; Lara, M.; López, P.; Martín, J.2017. Interpopulational and seasonal variation in the chemical signals of the lizard *Gallotia galloti*. *PeerJ*. 5-e3992. Google Scholar (7)
- 34 Popular science article.** Juan Antonio Hernández-Agüero; (2/2) Rodrigo Megía-Palma (AC). 2020. Primer registro de respuesta agresiva de *Gallotia galloti* hacia su imagen especular. *Boletín de la Asociación Herpetológica española*. Asociación Española de Herpetología. 31-1, pp.24-26. Google Scholar (1)
- 35 Popular science article.** 2017. Lizards and peacocks: 42 years of a revolutionary idea in ecology. *Naturalmente: Revista del Museo Nacional de Ciencias Naturales*. Museo Nacional de Ciencias Naturales. 16, pp.19-22.

C.2. Conferences and meetings

- 1 Gemma Palomar; Rodrigo Megía-Palma. Host abundance explains the genetic diversity of blood parasites in an island. CNRS - Jacques Monod Conference. CNRS. 2023. France.
- 2 Unravelling stress and the environment: what contributes to baseline stress markers in the Tenerife lizard (*Gallotia galloti*). XXII European Congress of Herpetology. European Society of Herpetology (SEH). 2023. United Kingdom.

- 3 Coccidians in the blood: from classic to next generation tools to investigate evolutionary implications of infection. XIII International Coccidiosis Conference. Universidad de Bohemia del Sur de České Budějovice. 2023. Czech Republic.
- 4 Anamarija Žagar; Rodrigo Megía Palma; Tatjana Simčič; Urban Dajčman; Frederico M Barroso; Senka Baškiera; Miguel A. Carretero. Can we use metabolic parameters to understand thermal preferences? A case study of five lacertid lizards. 21st European Congress of Herpetology Belgrade. Societas Europaea Herpetologica (SEH). 2022. Serbia.
- 5 Rodrigo Megía Palma; Rafael Barrientos. Road proximity affects reproductive investment in lizards: a two-year translocation experiment. The IENE International Conference "LIFE LINES – Linear Infrastructure Networks with Ecological Solutions". Universidade de Évora. 2021. Portugal.
- 6 Miguel A. Carretero; Nina Serén; Rodrigo Megía-Palma; Tatjana Simcic; Anamarija Zagar. Conservatism and plasticity in the ecophysiology of a lizard across a steep environmental gradient. 9th World Congress of Herpetology. University of Otago. 2020. New Zealand. Participatory - oral communication. Conference.
- 7 Rodrigo Megía-Palma; Isaac Pozo; Beatriz Tomé; et al; Miguel Á. Carretero. Testing a mechanistic hypothesis: how does climate predict the distribution of parasites in lizards?. 9th World Congress of Herpetology. University of Otago. 2020. New Zealand. Participatory - oral communication. Conference.
- 8 Nina Serén; Rodrigo Megía-Palma; Fabio Guarino; Anamarija Zagar; T Simcic; Catarina Pinho; Miguel Ángel Carretero. How (will) ectotherms cope with changing environments? A test with a lizard under contrasting ecological pressures. XX European Congress of Herpetology. University of Milan. 2019. Italy. Conference.
- 9 Dr.. Road proximity may compromise antiparasitic response and fat storage in a generalist lizard: A translocation field experiment. African Conferences for Linear Infrastructure & Ecology (ACLIE, 2019). Kruger National Park. 2019. South African Republic. Conference.
- 10 Rodrigo Megía Palma; Isaac Pozo; Anamarija Zagar; Nina Serén; Lucía Arregui; Javier Martínez; Miguel Ángel Carretero; Santiago Merino. Climatic variables predict the mean local abundance of blood parasites of the genus *Karyolysus* (Coccidia: Adeleorina) in an endemic insular host lizard, *Gallotia galloti*. Trends in Biology and Evolution (Tibe) 2018. CIBIO-InBIO. 2018. Portugal.
- 11 Anamarija Zagar; Miguel Ángel Carretero; Nina Serén; Rodrigo Megía Palma; Tatjana Simcic. Exploring the functional role of metabolism in *Gallotia galloti* across 3600 m of altitudinal gradient. XV Congreso Luso-Español de Herpetología - XIX Congreso Español de Herpetología. FUNDACION GENERAL DE LA UNIVERSIDAD DE SALAMANCA. 2018. Spain.
- 12 Nina Serén; Rodrigo Megía Palma; Fabio Guarino; Anamarija Zagar; Tatjana Simcic; Catarina Pinho; Miguel Ángel Carretero. Are telomeres good indicators of environmental stress? Answers from lizard altitudinal gradients. II Joint Congress on Evolutionary Biology – Montpellier 2018. European Society for Evolutionary Biology, the American Society of Naturalists, the Society for the Study of Evolution and the Society of Systematic Biologists. 2018. France.

C.3. Research projects and contracts

- 1 **Project.** The role of blood parasites in emerging disease dynamics and biodiversity loss in amphibians (2021/41/B/NZ8/00708)). CENTRO DE ACUSTICA APLICADA Y EVALUACION NO DESTRUCTIVA. Palomar. (Jagiellonian University). 2021-2024. 273.000 €.
- 2 **Project.** WETADAPT – Wet conditions under threat of Global Climate Change: adaptive and plasticity potential of metabolism and water retention in terrestrial ectotherms. Slovenian Research Agency. (National Institute of Biology). 01/09/2020-31/08/2023. 300.000 €.
- 3 **Project.** Modulators of parasite-host relationships: climate and interactions between organisms (MOPHCLINT). Santiago Merino Rodríguez. (Museo Nacional de Ciencias Naturales / Estación Experimental de Zonas Áridas). 01/01/2019-31/12/2022. 208.000 €.

- 4 **Project.** GCRESPONSE: A reptile model and 3600 m of altitudinal gradient to infer the ectotherm response in Portugal. Fundação Ciências e Tecnologia. Miguel Ángel Carretero. (CIBIO-InBIO, Biodiversity and Genetic Resources Centre). 2018-2022. 238.000 €.

NOT VALID