

CURRICULUM VITAE

[Revised 05/2024]

Juan López Cantalapiedra


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Date of birth. 15.12.1982

Place of birth. Palencia, Spain

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 Researcher ID: L-2135-2014 ORCID Code: 0000-0003-0913-7735**Brief Scientific CV****Supervision:** 3 PhD Thesis and 1 postdoc**Total Research Funding as PI:** 1.100,000€**Mean Impact Factor:** 10.4**Last 5 years:** 491 citations; 14 citations per citable article.**SCI papers:** 36 • 28 Q1 • 16 D1 • 9 Q1 as first author**Other publications:** 8 non SCI publications and book chapters; 55 conferences proceedings**H index:** 15**Teaching experience:** 390 hours of lectures and practices. 396 hours at private courses.**University Formation**

2011 Ph.D. in Paleontology. Universidad Complutense de Madrid.
 Thesis *Evolutionary and ecological analyses of ruminants based on phylogenetic data*
 Defence in Nov. 2011. *Cum laude.*

2005-2007 Doctoral studies: **Advanced Studies Diploma (DEA)**
 “*Correlation between ghost lineages and ecological variables of ruminants (Artiodactyla, Mammalia)*”
 Program: Palaeontology

2000-2005 **Master in Biological Sciences**
 Faculty of Biological Sciences
 Universidad Complutense de Madrid

Current professional situation

Position: Senior Research Fellow - Talent Attraction Program.

Organism: Universidad de Alcalá

Dpto Ciencias de la Vida

28805 Alcalá de Henares

Madrid - Spain

Research Lines

evolution, paleobiology, phylogeny, evolutionary biology, diversification, extinction, paleoecology, community ecology

Scientific and professional activities

- 12.2023-present **Tenured Scientist**
Institution: Spanish National Research Council
Center: National Sciences Museum
- 04.2018-08.2023 **Visiting Researcher**
Institution: Universidad de Alcalá de Henares
Center: Life Sciences Dpt
- 04.2018-04.2023 **Talent Attraction Program - Principal Researcher**
Institution: Universidad de Alcalá de Henares
Center: Life Sciences Dpt
- 08.2017-03.2018 **DFG Postdoctoral Contract**
Institution: German Research Foundation
Center: Museum für Naturkunde (Berlin)
- 05.2015-04.2017 **Humboldt Postdoctoral Fellowship**
Institution: Humboldt Foundation
Center: Museum für Naturkunde (Berlin)
- 12.2012-01.2014 **Postdoctoral Contract**
Institution: Consejo Superior de Investigaciones Científicas (CSIC)
Centre: Museo Nacional de Ciencias Naturales (Madrid, Spain).
- 2007-2011 **Predoctoral Grant**
 University Personnel Formation (FPU), financed by the Spanish Ministerio de Educación y Ciencia Reference: AP2006-22 (call 31th de August de 2006)
Institution: Consejo Superior de Investigaciones Científicas (CSIC)
Centre: Museo Nacional de Ciencias Naturales (Madrid, Spain).

2007 **I3P Contract**, financed by the CSIC
 Institution: Consejo Superior de Investigaciones Científicas (CSIC)
 Centre: Museo Nacional de Ciencias Naturales (Madrid, Spain).

Supervision of Graduate students and research fellows

PhD thesis: *'Paleobiogeography, global climate changes and macroevolution in non-passerines birds: radiation, dispersion and adaptation patterns during the Cenozoic'*

Author: J.S. Pelegrin Ramírez

Universidad Complutense de Madrid

Departamento de Paleontología

Defended 14 of December of 2015

PhD thesis: 'Influence of Cenozoic climatic and tectonic events on the macroevolutionary processes of flying organisms'

Author: Sara Gamboa Jurado-Centurión

Universidad Complutense de Madrid

Departamento de Paleontología

Defended 19 of February of 2021

PhD thesis: 'Major factors controlling diversity in Cenozoic terrestrial mammals'

Author: Fernando Blanco Segovia

Humboldt Universitat, Berlín

Faculty of Life Science

Defended 1st of July of 2022

Master's thesis: 'Molecular phylogeny and divergence times in the family Papilionidae Latreille 1802 (Lepidoptera)'

Author: Álvaro Fueyo Rodríguez

Defended in 2016

Research Visits

2022.04 Museum für Naturkunde, Berlin

2022.03 Daniele Silvestro's Lab at University of Fribourg

2017.05 Museum für Naturkunde, Berlin [stay between contracts]

2015.03 Museum für Naturkunde, Berlin [stay prior to the Humboldt Postdoc]

2012.01 Mikael Fortelius Lab. University of Helsinki

- 2010.09 FAB* Lab. Department of Biological Sciences, Simon Fraser University (Burnaby, Canada) and Department of Zoology, University of British Columbia
- 2009.09 Barnosky Lab. Department of Integrative Biology, UC Berkeley (Berkeley, US)
- 2008.09 FAB* Lab. Department of Biological Sciences, Simon Fraser University (Burnaby, Canada)

Commissions of Trust

- 2017 Evaluation panel of a **JCJC Project**.
French National Research Agency (ANR).
- 2021 Evaluation panel of a **DFG Project**.
German Research Foundation (Deutsche Forschungsgemeinschaft - DFG).

Editorial Board & Reviewer

Editorial Board member at *Biology Letters*

Review Editor at *Frontiers in Ecology and Evolution*.

Recommender at *PCI Evol Biol* and *PCI Paleo*.

I have reviewed papers for *Science*, *Nature*, *Nature Ecology and Evolution*, *Nature Communications*, *Nature Earth & Environment*, *Systematic Biology*, *Journal of Biogeography*, *Global Ecology and Evolution*, *Ecography*, *Science Advances*, , *Proceedings of the Royal Society B*, *Evolution*, *Paleobiology*, *Philosophical Transactions*, *Axios*, *PLoS Biology*, *PLoS One* and *Journal of Mammalian Evolution*.

Publications

Journals of Science Citation Index (SCI)

Chiarenza AA, **Cantalapiedra JL**, Jones LA, Gamboa S, Galván S, Farnsworth AJ, Valdes PJ, Sotelo G, Varela S. (*in press*). Early Jurassic origin of avian endothermy and thermophysiological diversity in dinosaurs. *Current Biology*.

Madern PA, Braumuller Y, Mavikurt AC, Mayda S, Bergwerff L, Janssen N, **Cantalapiedra JL**, Robles M, Casanovas-Vilar I, van Welzen PC & van den H. Ostende LW. (2023). Where's dinner? Variation in carnivoran distributional responses to the mid-Vallesian faunal turnover. *Palaeobiodiversity Palaeoenvironments*, 1–10. doi: <https://doi.org/10.1007/s12549-023-00588-w>

- Bibi F & **Cantalapiedra JL** (2023). Plio-Pleistocene African megaherbivore losses associated with community biomass restructuring. *Science* 380:1076–1080. doi: 10.1126/science.add8366
- Sanisidro O, Mihlbachler MC, **Cantalapiedra JL** (2023) A macroevolutionary pathway to megaherbivory. *Science* 380, 616–618. doi: 10.1126/science.ade1833
- Sanisidro O, Arganda Carreras I, **Cantalapiedra JL** (2023). Folded: a toolkit to describe mammalian herbivore dentition from 2D images. *Meth Ecol Evol.* 14: 556-568. doi: 10.1111/2041-210X.14042
- Pelegrín J, **Cantalapiedra JL**, Gamboa S, Menéndez I & Hernández Fernández M (2022) Phylogenetic biome conservatism as a key concept for an integrative understanding of evolutionary history: Galliformes and Falconiformes as study cases. *Zool J Linn Soc.* 198:47-71. doi: 10.1093/zoolinnean/zlac080
- Gamboa S, Condamine FL, **Cantalapiedra JL**, Varela S, Pelegrín J, Menéndez I, Blanco F & Hernández Fernández M (2022) A phylogenetic study to assess the link between biome specialisation and diversification in swallowtail butterflies. *Global Chang Biol.* doi:10.1111/gcb.16344.
- Fargallo JA, Navarro-López J, **Cantalapiedra JL**, Pelegrin JS & Hernández Fernández M (2022) Trophic niche breadth of Falconidae species predicts biomic specialisation but not range size. *Biology* 11:522. doi: 10.3390/biology11040522.
- Hernández-Fernández M, Pelegrin JS, Gómez Cano AR, Yelo BAG, Moreno-Bofarull A, Sánchez-Fontela N, Rodríguez-Ruiz C, Camacho AR, Domingo L, Menéndez I, Martín-Perea DM, Bazán CM, Alcalde GM, Domingo MS, Luna B, Cortés M, Arias A, Couturier GG, Villena AM, Anaya N, Blanco F, Galli E, Gamboa S, Quesada Á, Sanz-Pérez D, Varela S, **Cantalapiedra JL** (2022) Macroevolution and climate changes: a global multi-family test supports the resource-use hypothesis in terrestrial mammals. *Hist Biol* 34 (8): 1471-1479. doi: 10.1080/08912963.2022.2042807.
- Sanisidro O & **Cantalapiedra JL** (2022) The Rhinocerotidae fossil record in the Iberian Peninsula. *Hist Biol* 34 (8): 1591-1610. doi:10.1080/08912963.2022.2051502.
- Chiarenza AA, Fabri M, Consorti L, Muscioni M, Evans DC, **Cantalapiedra JL**, and Fanti F (2021) An Italian dinosaur Lagerstätte reveals the tempo and mode of hadrosauriform body size evolution. *Sci Rep* 11:23295. doi: 10.1016/j.quascirev.2021.106816
- Cantalapiedra JL**, Sanisidro O, Zhang H, Alberdi MT, Prado JL, Blanco F, Saarinen J (2021) The rise and fall of proboscidean ecological diversity. *Nat Ecol Evol.* 5, 1266-1272. doi: 10.1038/s41559-021-01498-w
- Blanco F, Calatayud J, Martín-Perea DM, Domingo MS, Menéndez I, Müller J, Hernández Fernández M, & **Cantalapiedra JL** (2021) Punctuated ecological equilibrium in mammal communities over evolutionary time scales. *Science* 372:300–303. doi: 10.1126/science.abd5110.

- García-Morato S, Fernández-Jalvo Y, Montalvo CI, Andrews P, Marin-Monfort MD, Fagoaga A, García ACD, Alberdi MT, Bonini R, Cerdeño E, Denys C, Domingo L, Domingo MS, Gutiérrez MA, **Cantalapiedra JL**, Pesquero MD, Prado JL, Sevilla P, Stoetzel E, Tomassini RL, and Fernández FJ (2021) New palaeoecological approaches to interpret climatic fluctuations in Holocene sites of the Pampean Region of Argentina. *Quaternary Sci Rev* 255:106816.
- Menéndez I, Gómez-Cano AR, **Cantalapiedra JL**, Peláez-Campomanes P, Álvarez-Sierra MA, Hernández Fernández M (2021) A multi-layered approach to the diversification of squirrels. *Mamm Rev*. 51: 66-81. doi: 10.1111/mam.12215.
- Cantalapiedra JL**, Aze T, Cadotte M, Valentina Dalla Riva G, Huang D, Mazel F, Pennell M, Ríos M, Mooers AØ (2019) Conserving evolutionary history does not result in greater diversity over evolutionary time scales. *Proc R Soc B*. 286. doi: 10.1098/rspb.2018.2896
- Tucker CM, Aze T, Cadotte M, **Cantalapiedra JL**, Chisholm C, Díaz S, Grenyer R, Huang D, Mazel F, Pearse WD, Pennell MW, Winter M, Mooers AØ (2019) Assessing the utility of conserving evolutionary history. *Biological Reviews*. 94: 1740-1760. doi: 10.1111/brv.12526
- Pimiento C, **Cantalapiedra JL**, Shimada K, Field DJ, Smaers JB (2019) Evolutionary pathways towards gigantism in sharks and rays. *Evolution*. 73: 1-12. doi: 10.1111/evo.13680.
- Ramm T, **Cantalapiedra JL**, Wagner P, Penner J, Mark-Oliver O, Müller J (2018) Divergent trends in functional and phylogenetic structure in reptile communities across Africa. *Nat Comm*. 9: doi:10.1038/s41467-018-07107-y
- Cantalapiedra JL**, Domingo MS, Domingo L (2018) Multi-scale interplays of biotic and abiotic drivers shape mammalian sub-continental diversity over millions of years. *Sci Rep*. 8:1-8. doi: 10.1038/s41598-018-31699-6
- Morales J, Peláez-Campomanes P, Pérez P, Alberdi MT, Azanza B, Pickford M, Ríos M, Sanisidro O, Alcalde GM, **Cantalapiedra JL**, Fraile S, García Yelo BA, Gómez-Cano AR, Hernández-Ballarín V, Oliver A, Cantero E, Valenciano A, Montoya P (2018) Neogene Mammal Sites in Molina de Aragón (Guadalajara, Spain): Correlation to Other Karstic Sites of the Iberian Chain, and their Geoheritage Values. *Geoheritage*. doi: 10.1007/s12371-018-0294-z.
- Blanco F, Gómez Cano AR, **Cantalapiedra JL**, Domingo MS, Domingo L, Menéndez I, Flynn LJ, Hernández Fernández M (2018) Differential responses of Miocene rodent metacommunities to global climatic changes were mediated by environmental context. *Sci Rep* 8:1-12. DOI:10.1038/s41598-018-20900-5
- Menéndez I, Gómez Cano AR, García Yelo BA, Domingo L, Domingo MS, **Cantalapiedra JL**, Blanco F, Hernández Fernández M (2017) Body size structure of Central Iberian mammal fauna reveals semidesertic conditions during the middle Miocene Global Cooling Event. *Plos One*. e0186762. DOI: 10.1371/journal.pone.0186762

- Cantalapiedra JL**, Prado JL, Hernández Fernández M, Alberdi MT (2017) Decoupled ecomorphological evolution and diversification in Neogene-Quaternary horses. *Science*. 355: 627-630. doi:10.1126/science.aag1772.
- Domingo SM, Martín-Perea D, Domingo L, Cantero E, **Cantalapiedra JL**, García Yelo BA, Gómez Cano AR, Alcalde G, Fesharaki O, Hernández Fernández M (2017) Taphonomy of mammalian fossil bones from the debris-flow deposits of Somosaguas-North (Middle Miocene, Madrid Basin, Spain). *Palaeogeogr Palaeoclimatol Palaeoecol* 465: 103-121. DOI: 10.1016/j.palaeo.2016.10.023.
- Sánchez IM, **Cantalapiedra JL**, Ríos M, Quiralte V, Morales J (2015) Systematics and Evolution of the Miocene Three-Horned Palaeomerycid Ruminants (Mammalia, Cetartiodactyla). 10(12): e0143034. *PLoS One*. DOI:10.1371/journal.pone.014303.
- Cantalapiedra JL**, Hernández Fernández M, Azanza B, Morales J (2015) Congruent phylogenetic and fossil signatures of ruminant diversification dynamics driven by Tertiary climate change. *Evolution* 69(11):2941-2953. DOI: 10.1111/evo.12787.
- Morales J, **Cantalapiedra JL**, Valenciano A, Hontecillas D, Fraile S, García Yelo BA, Montoya P, Abella J (2015) The fossil record of the Neogene Carnivore Mammals from Spain. *Palaeobiodivers Palaeoenviro* 95(3):373-386. (doi:10.1007/s12549-015-0206-z).
- Hernández Fernández M, **Cantalapiedra JL**, Gómez Cano AR (2015) Plio-Pleistocene climatic change had a major impact in the assembly and disassembly processes of Iberian rodent communities. *Palaeobiodivers Palaeoenviro* 95(3):387-404. (doi:10.1007/s12549-015-0196-x).
- Gómez Cano AR, **Cantalapiedra JL**, Álvarez Sierra MA, Hernández Fernández M (2014) A macroecological glance to the structure of late Miocene rodent assemblages from southwestern Europe. *Sci Rep* 4:1-8.
- Prado JL, Azanza B, **Cantalapiedra JL**, Alberdi MT (2014) Plio-Pleistocene Fossil Record of Large Predators in Iberia: Diversity, Home Range and Climatic Change. *Palaeogeogr Palaeoclimatol Palaeoecol* 399:404-413.
- García Yelo BA, Gómez Cano AR, **Cantalapiedra JL**, Alcalde GM, Sanisidro O, Oliver A, Hernández-Ballarín V, López-Guerrero P, Fraile S, Hernández Fernández M (2014) Palaeoenvironmental analysis of the Aragonian mammalian communities from the Madrid basin based on their body size diversity structure. *J Iber Geol*. 40(1):129-140.
- Cantalapiedra JL**, FitzJohn RG, Hernández Fernández M, DeMiguel D, Azanza B, Morales J, Mooers AØ (2014) Dietary innovations spurred the diversification of ruminants during the Cenozoic. *Proc R Soc B*. 281(1776).
- Cantalapiedra JL**, Hernández Fernández M, Morales J (2014) The biogeographic history of ruminant faunas determines the phylogenetic structure of their assemblages at different scales. *Ecography* 37(1): 1-9.

- Gómez Cano AR, **Cantalapiedra JL**, Mesa A, Moreno Bofarull A, Hernández Fernández M (2013) Global climate changes drive ecological specialization of mammal faunas: Trends in the Iberian Plio-Pleistocene rodent assemblages. *BMC Evol Biol* 13(94). DOI: 10.1186/1471-2148-13-94.
- Cantalapiedra JL**, Hernández Fernández M, Alcalde G, Azanza B, DeMiguel D, Morales J (2012) Ecological correlates of ghost lineages in ruminants. *Paleobiology*. 38(1):101-111.
- Cantalapiedra JL**, Hernández Fernández M, Morales J (2011) Biomic specialization and speciation rates in ruminants (Cetartiodactyla, Mammalia): a test of the resource-use hypothesis at the global scale. *PLoS One* 8(2). doi:10.1371/journal.pone.0028749.
- Cantalapiedra JL**, Mooers AØ, DeMiguel D, Azanza B, Hernández Fernández M (2009) Phylogeny of extant ruminants indicates the influence of global climatic changes and dietary adaptations on diversification rates. *J Vertebr Paleontol* 29(sp3):75A.
- Cantalapiedra JL**, DeMiguel D, Azanza B, Hernández Fernández M (2008) Ecological correlates of ghost lineages in ruminants. *J Vertebr Paleontol* 28(sp3):60A-61A.

Book chapters

- Cantalapiedra JL**, Sanisidro O, Cantero E, Prado JL & Alberdi MT (in press). Radiation of horses. *In The Equids: a suite of splendid species* (eds. Prins HTH & Gordon IJ).
- Sanisidro O, **Cantalapiedra JL** (2018) El registro fósil de la familia Rhinocerotidae. *In La colina de los tigres dientes de sable. Los yacimientos miocenos del cerro de los Batallones (Torrejón de Velasco, Comunidad de Madrid)*, ed Morales J. Museo Arqueológico Regional, Alcalá de Henares. Pp. 422-424
- Sánchez IM, Quiralte V, **Cantalapiedra JL**, Ríos M, Morales J (2018) Historia evolutiva de Ruminantia (mammalia, Cetartiodactyla). *In La colina de los tigres dientes de sable. Los yacimientos miocenos del cerro de los Batallones (Torrejón de Velasco, Comunidad de Madrid)*, ed Morales J. Museo Arqueológico Regional, Alcalá de Henares. Pp. 478-483
- Azanza B, Alberdi M, Blanco F, **Cantalapiedra JL**, DeMiguel D, Domingo MS, Gómez Cano AR, Hernández Fernández M (2018) Los yacimientos de Batallones en el contexto de la "Crisis Vallesiense". *In La colina de los tigres dientes de sable. Los yacimientos miocenos del cerro de los Batallones (Torrejón de Velasco, Comunidad de Madrid)*, ed Morales J. Museo Arqueológico Regional, Alcalá de Henares. Pp. 45-68
- Cantalapiedra JL**, FitzJohn RG, Kuhn TS, Hernández Fernández M, DeMiguel D, Azanza B, Morales J, Mooers AØ (2013) Using phylogenies for studying evolution: the case of the ruminant diets. *In Trending Topics in Palaeontology*, eds Navas-Parejo P, Martínez-Pérez C, Pla-Pueyo S. Atarfe (Granada, Spain). Pp. 39-42

- Pérez P, Fraile S, Sanisidro O, Oliver A, Hernández-Ballarín V, Alberdi MT, Pickford M, Cantero E, García Yelo BA, **Cantalapiedra JL**, Alcalde GM (2013) Preliminary study of the Turolian faunal assemblage of Corral de Lobato (Molina de Aragón, Guadalajara). In *Trending Topics in Palaeobiology*, eds Navas-Parejo P, Martínez-Pérez C, Pla-Pueyo S. Atarfe (Granada, Spain). Pp. 85-86
- Cantalapiedra JL**, Gascó F, Sanisidro O (2011) Breve historia paleobiogeográfica de Tyrannosauroides: registro fósil e incertidumbre [*Brief paleobiogeographic history of Tyrannosauroides: fossil record and uncertainty*]. In *Viajando a Mundos Pretéritos*, eds Pérez-García A, Gascó F, Gasulla JM, Escaso F. Ayuntamiento de Morella, Morella. Pp. 55-63
- Sanisidro O, **Cantalapiedra JL**, García Yelo BA (2012) Cambios faunísticos y diversificación en la familia Rhinocerotidae [*Faunal turnovers and diversification in the Family Rhinocerotidae*]. In *Paleodiversity and Paleoecology of Iberian Ecosystems*, eds Martínez-Pérez C, Furió M, Santos-Cubedo A, Poza B. Sot de Chera (Valencia, Spain). Pp. 161-163

Non SCI Journals

- Sánchez IM, Morales J, **Cantalapiedra JL**, Quiralte V, and Pickford M. (2018) Preliminary phylogenetic analysis of the Tragulidae (Mammalia, Cetartiodactyla, Ruminantia) from Arrisdrift: implications for the African Miocene tragulids. *Communications of the Geological Survey of Namibia* 12:110–122.
- Sánchez IM, Morales J, **Cantalapiedra JL**, Quiralte V, and Pickford M. (2018) Propalaeoryx Stromer 1926 (Ruminantia, Pecora, Giraffomorpha) revisited: systematics and phylogeny of an African palaeomerycid. *Communications of the Geological Survey of Namibia* 19:123–131.
- Cantalapiedra JL**, Alcalde GM, Hernández Fernández M (2014) The contribution of Phylogenetics to the study of Ruminant Evolutionary Ecology. *Zitteliana* 32:47-52.
- Morales J, Peláez-Campomanes P, Abella J, Montoya P, Ruiz FJ, Gibert L, Scott G, **Cantalapiedra JL**, Sanisidro O (2013) The Ventian mammal age (Latest Miocene): present state. *Spanish Journal of Palaeontology* 28(2):152-162.
- Sanisidro O, **Cantalapiedra JL** (2010) Nuevas técnicas paleobiogeográficas aplicadas a la familia Rhinocerotidae (Perissodactyla) [*New paleobiogeographic tools applied to the Family Rhinocerotidae (Perissodactyla)*]. *Cidaris* 30:293-298.
- Pérez González S, **Cantalapiedra JL**, Alcalde GM, Hernández Fernández M (2008) Análisis de los patrones de coloración en bóvidos (Ruminantia, Artiodactyla): aplicaciones en la paleorreconstrucción de *Tethytragus* Azanza & Morales, 1994 [Analyzing the bovid colour patterns (Ruminantia, Artiodactyla): applications to the paleoreconstruction of *Tethytragus*]. *Paleolusitana* 1:373-382.

Morales J, Pozo M, Silva PG, Domingo MS, López-Antoñanzas R, Álvarez Sierra MA, Antón M, Martín Escorza C, Quiralte V, Salesa MJ, Sánchez IM, Azanza B, Calvo JP, Carrasco P, García-Paredes I, Knoll F, Hernández Fernández M, van den Hoek Ostende L, Merino L, van der Meulen AJ, Montoya P, Peigné S, Peláez-Campomanes P, Sánchez-Marco A, Turner A, Abella J, Alcalde GM, Andrés M, DeMiguel D, **Cantalapiedra JL**, Fraile S, García Yelo BA, Gómez Cano AR, López Guerrero P, Oliver Pérez A, Siliceo G (2008) El sistema de yacimientos de mamíferos miocenos del Cerro de los Batallones, Cuenca de Madrid: estado actual y perspectivas [The miocene mammalian fossil sites system in Batallones: state of the field and perspectives]. *Seminario de Paleontología de Zaragoza* 8:41-117.

Cantalapiedra JL, Hernández Fernández M, Morales J (2006) Linajes fantasma y correlación con variables ecológicas: el caso de la Subfamilia Caprinae [Ghost lineages and their correlation with ecological features: the case of the Subfamily Caprinae]. *Estud Geol* 62(1):167-176. doi: 10.3989/egeol

Congresses and symposia

Cantalapiedra JL, Lazagabaster IA, Blanco F, Bibi F, Ríos M, Mennecart B, Saarinen J, Hauffe T, Silvestro D & Sanisidro O (2023) The largest herbivores collapsed first during the Plio-Pleistocene diversity crisis of African mammalian faunas. *20th Annual Meeting of the European Association of Vertebrate Palaeontologists*. Sabadell (Spain). [Oral presentation]

Chiarenza AA, Farnsworth AJ, **Cantalapiedra JL**, Gamboa S, Galván S, Sotelo G, Varela S 2023. Tempo e modo nell'evoluzione della nicchia climatica in Dinosauria (Sauropsida: Archosauria). XXIII edizione delle Giornate di Paleontologia. Lecce (Italy). [Oral presentation]

Blanco F, Lazagabaster IA, Sanisidro O, Bibi F, Heckberg N, Ríos M, Mennecart B, Müller J, Calatayud J & **Cantalapiedra JL** 2022. Tempo and mode of large herbivores ecosystem structure during the Cenozoic. *6th International Palaeontological Congress*. Khon Kaen, Thailand. [Oral presentation]

Cantalapiedra JL, Sanisidro O, Cantero E, Prado JL & Alberdi MT 2022. New insights on the diversificación of horses. *82nd Annual Meeting of the Society of Vertebrate Paleontology*. Toronto, Canada. [Oral presentation]

Sanisidro O, Arganda Carreras I, **Cantalapiedra JL** 2022. A new method to translate dental complexity of herbivore mammals into numerical descriptors: the case study of hypsodont rhinos. *82nd Annual Meeting of the Society of Vertebrate Paleontology*. Toronto, Canada. [Oral presentation]

Cantalapiedra JL, Sanisidro O, Cantero E, Prado JL & Alberdi MT 2022. New insights on the diversificación of horses. *37as Jornadas de la Sociedad Española de Paleontología*. Cuenca (Spain). [Oral presentation]

- Sanisidro O, Arganda Carreras I, **Cantalapiedra JL** 2022. A new method of 2D enamel analysis reveals two divergent evolutive strategies within Rhinocerotidae. *37^{as} Jornadas de la Sociedad Española de Paleontología. Cuenca (Spain)*. [Oral presentation]
- Cantalapiedra JL**, Sanisidro O, Cantero E, Prado JL & Alberdi MT 2022. Revisiting the radiación of horses. *19th Annual Meeting of the European Association of Vertebrate Palaeontologists. Benevento (Italy)*. [Oral presentation]
- Sanisidro O, Arganda Carreras I, **Cantalapiedra JL** 2022. 2d OPC: a new method to describe dental complexity of herbivore mammals. *19th Annual Meeting of the European Association of Vertebrate Palaeontologists. Benevento (Italy)*. [Oral presentation]
- Gamboa S, Condamine FL, Cantalapiedra JL, Pelegrín J, Menéndez I, Varela S, Blanco F, & Hernández Fernández M. 2021. Biome specialization promotes diversification in swallowtail butterflies. *65th Palaeontological Association Annual Meeting. Manchester, United Kingdom*. [Poster]
- Sanisidro O, Mihlbachler MC, **Cantalapiedra JL** 2021. Las altas tasas evolutivas del tamaño en brontoterios (Mammalia, Brontotheriidae) los emplazan como pioneros entre los megaherbívoros. *36th Jornadas de la Sociedad Española de Paleontología. Online*. [Oral presentation]
- Cantalapiedra JL**, Sanisidro O, Zhang H, Alberdi MT, Prado JL, Blanco F, Saarinen J 2021. Auge y declive de los proboscídeos. *36th Jornadas de la Sociedad Española de Paleontología. Online*. [Oral presentation]
- Gamboa S, Condamine FL, **Cantalapiedra JL**, Pelegrín J, Menéndez I & Hernández Fernández M. 2021. Biome specialization enhances diversification in swallowtail butterflies. *Closing the Paleontological-Ecological Gap (CPEG). Berlin, Germany*. [Oral presentation]
- Kim SW, Huang D, **Cantalapiedra JL**, Pandolfi JM 2021. Evolutionary considerations can help safeguarding the future of coral biodiversity. *14th International Coral Reef Symposium. Bremen, Germany*. [Oral presentation; presenter: Kim SW]
- Cantalapiedra JL**, Sanisidro O, Mihlbachler MC, 2020. Active trends and higher extinction of smaller lineages drove body mass increase in brontotheres. *64th Annual Meeting of The Palaeontological Association Virtual Annual Meeting. Online* [Oral presentation].
- Sanisidro O, Mihlbachler MC, **Cantalapiedra JL** 2020. Differential lineage survival drove body size increase in brontotheres. *2020 Geological Society of America Annual Meeting. Online* [Oral presentation].
- Cantalapiedra JL**, Alberdi M, Prado JL, Sanisidro O, Blanco F, Saarinen J 2019. The rise and fall of proboscideans' functional diversity. *63rd Annual Meeting of The Palaeontological Association. Valencia, Spain*. [Poster]

- Blanco F, Calatayud J, Martín-Perea D, Domingo MS, Meléndez I, Hernández Fernández M, **Cantalapiedra JL** 2019. Twenty million years of decoupled functional-taxonomical assembly processes revealed by network analysis. *63rd Annual Meeting of The Palaeontological Association*. Valencia, Spain. [Poster]
- Cantalapiedra JL**, Alberdi MT, Prado JL, Zhang H, Sanisidro O, Blanco F, Saarinen J 2019. Ecological function and macroevolutionary patterns in proboscideans. *79th Annual Meeting of the Society of Vertebrate Paleontology*. Brisbane, Australia. [Oral presentation]
- Blanco F, Martín-Perea D, Domingo MS, Calatayud J, Meléndez I, Hernández Fernández M, **Cantalapiedra JL** 2019. Network analysis unveils the functional succession of Iberian mammalian faunas over the last 20 myr. *79th Annual Meeting of the Society of Vertebrate Paleontology*. Society of Vertebrate Paleontology. Brisbane, Australia. [Oral presentation]
- Sanisidro O, **Cantalapiedra JL**, Cotte S 2019. A review of African Elasmotheres (Mammalia, Rhinocerotidae) and their role on early Miocene migration events into East Africa. *79th Annual Meeting of the Society of Vertebrate Paleontology*. Society of Vertebrate Paleontology. Brisbane, Australia. [Oral presentation]
- Menéndez I, Gómez Cano AR, **Cantalapiedra JL**, Peláez-Campomanes P, Álvarez-Sierra MA & Hernández Fernández M. 2019 Ecological traits mediated diversification patterns in squirrels (Sciuridae, Rodentia) in response to climatic shifts during the Cenozoic. *XXXVIII Annual Meeting of the Willi Hennig Society*. Berkeley, California. [Poster]
- Oksanen O, Žliobaitė I, Saarinen J, Domingo S, **Cantalapiedra JL**, Viranta S, Tittton S, Serrano-Ramos A, Kaakinen A, Blain HG, Oms O, Agustí J, Luzón C, García-Solano J, Barsky D, Fortelius M, Jiménez Arenas JM 2019. An ecometric perspective on early human occupation in western Eurasia. *20th Congress of the International Union for Quaternary Research (INQUA)*. Dublin, Ireland. [Oral presentation]
- Blanco F, Martín-Perea D, Domingo MS, Meléndez I, Hernández Fernández M, **Cantalapiedra JL** 2019. Fight of the Century: Functional Redundancy vs Ecosystem Resilience. *12th International Congress of Vertebrate Morphology*. Prague, Czech Republic. [Oral presentation].
- Sánchez I, **Cantalapiedra JL**, Quiralte V, Morales J 2019 Morphology and Evolution of Palaeomerycid (Mammalia, Ruminantia, Giraffomorpha) Headgear. *12th International congress of Vertebrate Morphology*. Prague, Czech Republic. [Oral presentation]
- Gamboa S, **Cantalapiedra JL**, Pelegrín J, Hernández Fernández, M. 2019. Biomic specialization as a tool in macroevolution: testing the resource-use hypothesis. *9th Biennial Conference of the International Biogeography Society*. Málaga, Spain. [Poster]

- Cantalapiedra JL**, Prado JL, Sanisidro O, Alberdi M. 2018. Taxonomic and ecomorphological diversification in horses. *78th Annual Meeting of the Society of Vertebrate Paleontology*. Albuquerque, New Mexico, USA. [Oral presentation]
- Cantalapiedra JL**, Aze T, Cadotte MW, Dalla Riva G, Huang D, Mazel F, Pennell MW, Ríos M, Mooers A. 2018. Conserving evolutionary history does not result in greater diversity over geological timescales. *Closing the Palaeontological – Ecological Gap*. Leeds, UK. [Oral presentation; presenter: Tracy Aze]
- Cantalapiedra JL**, Prado JL & Alberdi MT (2018) Preservation rates and fossil phylogenies. *II Joint Congress on Evolutionary Biology*. Montpellier, France. [Oral presentation]
- Bibi F, **Cantalapiedra JL**, Baermann EV, Costeur L, Grau J, Heckeberg NS, Li Y, Meixner M, Mennecart B, Tyler J. 2018. Integrating fossil and genomic datasets for phylogenetic analyses of Ruminantia (Mammalia, Artiodactyla). *II Joint Congress on Evolutionary Biology*. Montpellier, France.
- Blanco F, Gamboa S, Pelegrín JS, **Cantalapiedra JL**, Menéndez I, Hernández Fernández M. 2018. Ecological specialization and Macroevolutionary patterns: First test of resource-use hypothesis in marine vertebrates (Cetacea, Mammalia). *II Joint Congress on Evolutionary Biology*. Montpellier, France.
- Gómez Cano AR, Hernández-Ballarín V, López Guerrero P, Oliver Pérez A, **Cantalapiedra JL**. 2018. Modelling the evolution of Sigmodontinae rodent molars. *II Joint Congress on Evolutionary Biology*. Montpellier, France.
- De Esteban-Trivigno S, **Cantalapiedra JL**, Fortuny J, Marcé-Nogué J. 2018. The wanderer glyptodont: how fossils can affect macroevolutionary patterns. *II Joint Congress on Evolutionary Biology*. Montpellier, France.
- Pimiento C, **Cantalapiedra JL**, Shimada K, Smaers J (2017) How to be a giant elasmobranch? *21st Annual European Elasmobranch Association Scientific Conference*. Amsterdam (Netherlands). [Oral presentation]
- Sanisidro O, **Cantalapiedra JL**. (2017) Diversification patterns in the family Rhinocerotidae. *77th Annual Meeting of the Society of Vertebrate Paleontology*. Society of Vertebrate Paleontology, Alberta (Canada).
- Martín-Perea D, Domingo SM, Domingo L, Cantero E, **Cantalapiedra JL**, García Yelo BA, Gómez Cano AR, Alcalde G, Fesharaki O, Menéndez I, Hernández Fernández M (2017) Taphonomic study of Somosaguas-North (Madrid Basin, Spain), a Middle Miocene mammalian fossil site deposited by debris flows. *XV Annual Meeting of the European Association of Vertebrate Palaeontologists*. Munich (Germany).
- Cantalapiedra JL**, Domingo MS, Domingo L (2017) The interplay between local environment, ecological shifts and continental migrations shaped Iberian mammalian diversity over millions of years. *XV Annual Meeting of the European Association of Vertebrate Palaeontologists*. Munich (Germany). [Oral presentation]

- De Esteban-Trivigno S, **Cantalapiedra JL**, Marcé-Nogué J, Boscaini A (2016) Early dietary, jaw shape and biomechanical performance differentiation in the evolution of armadillos (Xenarthra: Cingulata). *XI International Congress of Vertebrate Morphology*. Washington DC (US).
- Marcé-Nogué J, Dasch A, De Esteban-Trivigno S, González P, **Cantalapiedra JL**, Kaiser TM (2016) Biomechanics as a predictor of enamel thickness in extinct primates. *XIV Annual Meeting of the European Association of Vertebrate Palaeontologists*. Haarlem (The Netherlands).
- De Esteban-Trivigno S, Marcé-Nogué J, Boscaini A, **Cantalapiedra JL** (2016) Evolution of jaw shape and biomechanics in carnivores: a phylogenetic approach. *XIV Annual Meeting of the European Association of Vertebrate Palaeontologists*. Haarlem (The Netherlands).
- De Esteban-Trivigno S, **Cantalapiedra JL**, Marcé-Nogué J, Boscaini A (2016) Combining geometric morphometrics with finite elements analysis in armadillos. *II Iberian Symposium on Geometric Morphometrics*. Madrid, Spain.
- Cantalapiedra JL**, Prado JL, Hernández Fernández M, Alberdi MT (2016) Diversification and rapid phenotypic evolution decoupled in Neogene horses. *Evolution Meeting 2016*. Austin (Texas, US). [Oral presentation]
- Cantalapiedra JL**, Hernández Fernández M, Azanza B, Morales J (2015) Congruent phylogenetic and fossil signatures of mammalian diversification dynamics. *2015 Geological Society of America Annual Meeting*. Baltimore (USA). [Oral presentation]
- Sánchez I, Ríos M, **Cantalapiedra JL**, Quiralte V, Morales J (2015) Superficial similarity vs. synapomorphic similarity: the case of the Palaeomerycidae and the Dromomerycidae (Cetartiodactyla, Ruminantia, Pecora). *XIII Meeting of Early-Stage Researchers in Paleontology (XIII EJIP)*. Cercedilla (Spain). [Oral presentation]
- Pelegrín J, **Cantalapiedra JL**, Hernández Fernández M (2015) The macroevolutionary role of migration for bird occupation of biomes with adverse climatic conditions. *XIII Meeting of Early-Stage Researchers in Paleontology (XIII EJIP)*. Cercedilla (Spain). [Oral presentation]
- Cantalapiedra JL**, Madern A, Casanovas-Vilar I, Eronen J, Fortelius M (2014) A paleobiogeographic approach to the Vallesian mammal turnover at a continental scale. *74th Annual Meeting of the Society of Vertebrate Paleontology*. Berlin (Germany).
- Pelegrín J, **Cantalapiedra JL**, Hernández Fernández M (2014) A phylogenetic perspective of the Avian trophic diversification: integrating paleontological and neontological information. *74th Annual Meeting of the Society of Vertebrate Paleontology*. Berlin (Germany).
- García Yelo BA, Gómez Cano AR, **Cantalapiedra JL**, Farrel A, Morales J, Hernández Fernández M (2014). Structural changes in late Pleistocene carnivore fauna from

Rancho La Brea. *74th Annual Meeting of the Society of Vertebrate Paleontology*. Berlin (Germany).

Pelegrín J, **Cantalapiedra JL**, Hernández Fernández M (2014) Macroevolutionary processes in non-passeriform birds (Aves) at the global scale. *26th International Ornithological Congress*. Tokyo (Japan).

Cantalapiedra JL, Hernández Fernández M, Azanza B, Morales J (2013) Evolutionary rates for ruminants based on fossils and phylogenies. *International Conference on Ruminant Phylogenetics*. Munich (Germany). [Oral presentation]

Cantalapiedra JL, FitzJohn RG, Kuhn TS, Hernández Fernández M, DeMiguel D, Azanza B, Morales J, Mooers AØ (2013) Using phylogenies for studying evolution: the case of the ruminant diets. *XI Encuentro de Jóvenes Investigadores en Paleontología*. Atarfe (Granada, Spain). [Oral presentation]

Pérez P, Fraile S, Sanisidro O, Oliver A, Hernández-Ballarín V, Alberdi MT, Pickford M, Cantero E, García Yelo BA, **Cantalapiedra JL**, Alcalde GM (2013) Preliminary study of the Turolian faunal assemblage of Corral de Lobato (Molina de Aragón, Guadalajara). *XI Encuentro de Jóvenes Investigadores en Paleontología*. Atarfe (Granada, Spain). [Oral presentation]

Sanisidro O, **Cantalapiedra JL**, García Yelo BA (2012) Cambios faunísticos y diversificación en la familia Rhinocerotidae [*Faunal turnovers and diversification in the Family Rhinocerotidae*]. *X Encuentro de Jóvenes Investigadores en Paleontología*. Sot de Chera (Valencia, Spain). [Oral presentation]

Hernández Fernández M, **Cantalapiedra JL**, Cantero E, Domingo L, García Yelo BA, Gómez Cano AR (2012) Valoración patrimonial de los yacimientos del Mioceno medio de Somosaguas (Pozuelo de Alarcón, Madrid) [*Assessing the heritage from the middle Miocene fossil sites of Somosaguas*]. *Workshop en Homenaje a Nieves López Martínez: "Aquello que nos faltó decirte"*. Miraflores de la Sierra (Madrid, Spain). [Oral presentation]

Cantalapiedra JL, Gascó F, Sanisidro O (2011) Breve historia paleobiogeográfica de Tyrannosauroida: registro fósil e incertidumbre [*Brief paleobiogeographic history of Tyrannosauroida: fossil record and uncertainty*]. *IX Encuentro de Jóvenes Investigadores en Paleontología*. Morella (Castellón, Spain). [Oral presentation]

Hernández Fernández M, **Cantalapiedra JL**, Gómez Cano AR, García Yelo BA, Moreno Bofarull A (2011) Tempo and mode in the influence of global climatic changes on mammalian evolution. *XVIII INQUA Congress (International Union for Quaternary Research)*. Bern (Switzerland).

Sanisidro O, **Cantalapiedra JL** (2010) Nuevas técnicas paleobiogeográficas aplicadas a la Familia Rhinocerotidae (Perissodactyla) [*New paleobiogeographic tools applied to the Family Rhinocerotidae (Perissodactyla)*]. *VIII Encuentro de Jóvenes Investigadores en Paleontología*. Enciso (La Rioja, Spain). [Oral presentation]

Cantalapiedra JL, Mooers AØ, DeMiguel D, Azanza B, Hernández Fernández M (2009)
Phylogeny of extant ruminants indicates the influence of global climatic changes and dietary adaptations on diversification rates. *69th Annual Meeting of the Society of Vertebrate Paleontology*. Bristol (UK).

Pérez González S, **Cantalapiedra JL**, Alcalde GM, Hernández Fernández M (2008)
Análisis de los patrones de coloración en bóvidos (Ruminantia, Artiodactyla): aplicaciones en la paleorreconstrucción de *Tethytragus* Azanza & Morales, 1994 [Analyzing the bovid colour patterns (Ruminantia, Artiodactyla): applications to the paleoreconstruction of *Tethytragus*]. *VII Encontro de Jovens Investigadores em Paleontologia*. Torres Vedras (Portugal).

Cantalapiedra JL, Alcalde GM, DeMiguel D, Azanza B, Hernández Fernández M (2008)
Ecological correlates of ghost lineages in ruminants. *68th Annual Meeting of the Society of Vertebrate Paleontology*. Cleveland, Ohio (US).

I+D Projects

Title: Trends in Evolution [TrEvol]

Research Project CNS2023-144573, 199.944 € financed by the *Ministerio de Ciencia e Innovación*

Organism: Museo nacional de Ciencias Naturales [CSIC]

Time frame: 2024-2026

Principal researcher: [Juan López Cantalapiedra](#)

Title: The ecological context of early vertebrate evolution: contributions from virtual palaeontology (EcoVertEvo)

Research Project PID2022-138832NA-100, 100.000 € financed by the *Ministerio de Ciencia e Innovación*

Organism: Universidad de Valencia

Time frame: 2023-2025

Principal researcher: [Humberto Ferrón Jiménez](#)

Title: Análisis paleoecológico y paleoclimático multiproxy del registro fósil ibérico y sudamericano durante el Cenozoico final: un enfoque inter-hemisferio

Research Project PID2022-138275NB-I00, 168.750 € financed by the *Ministerio de Ciencia e Innovación*

Organism: Universidad Complutense de Madrid

Time frame: 2023-2026

Principal researcher: [Laura Domingo Martínez](#)

Title: The deep time drivers of biodiversity at the local, regional and global scales

Research Project, 175.000 € financed by the *Fundação de Amparo à Pesquisa do Estado de São Paulo* (FAPESP), Brazil

Organism: Universidad de Sao Paulo

Time frame: 2022-2027

Principal researcher: Tiago Quental

Title: Taxonomic and phenotypic diversification of Cenozoic terrestrial large herbivores

Research Project 2017-T1/AMB-5298, 440.000€ financed by the *Talent Attraction Program* (Madrid Government) and the Universidad de Alcalá de Henares

Organism: Universidad de Alcalá de Henares

Time frame: 2018-2023

Hired personnel: 1 postdoc researcher

Principal researcher: Juan López Cantalapiedra

Title: Comparación multidisciplinar inter-hemisferio: estudio biogeoquímico y paleobiológico combinado del registro fósil español y argentino en el Cenozoico final.

Research Project PGC2018-094955-A-I00, 120,000€ financed by the *Ministerio de Ciencia e Innovación*

Organism: Universidad Complutense

Time frame: 2019-2022

Principal researcher: Laura Domingo Martínez

Title: Historia evolutiva de las plantas y bienestar humano en un mundo cambiante; evaluando los fundamentos teóricos con evidencias empíricas y nuevas herramientas filogenética.

Research Project CM/JIN/2019-005, 39,660.40 € financed by the Madrid Government.

Organism: Universidad de Alcalá de Henares

Time frame: 2020-2021

Principal researcher: Rafael Molina Venegas

Title: Major factors controlling diversity in Cenozoic terrestrial herbivores.

Research Project, 284,850 € financed by the German Research Foundation (DFG)

Organism: Museum für Naturkunde (Berlin)

Time frame: 2017-2020

Hired personnel: 1 PhD student

Principal researcher: Juan López Cantalapiedra (Museum für Naturkunde)

Title: Unveiling the ecological response of mammals to past environmental change using exhaustive phylogenetic information.

Research Project, 83,000€ financed by the Humboldt Foundation

Organism: Museum für Naturkunde (Berlin)

Time frame: 2015-2017

Principal researcher: Faysal Bibi & Juan López Cantalapiedra (Museum für Naturkunde)

Title: Global change and mammalian diversity. A test of the influence of climate shifts based on the fossil record.

Research Project CGL 2010-19116/BOS, financed by Spanish Ministerio de Educación y Ciencia

Organism: Departamento de Paleobiología, Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas)

Time frame: 2011-2014

Principal researcher: María Teresa Alberdi (CSIC)

Title: Palaeontology, Taphonomy and Geomorphology of the pseudokarstic fossil sites from Cerro de los Batallones (upper Miocene, Madrid Basin)

Research Project CGL 2008-05813-C02-01/BTE, financed by Spanish Ministerio de Ciencia e Innovación

Organism: Departamento de Paleobiología, Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas)

Time frame: 2008-2011

Principal researcher: J. Morales Romero (CSIC)

Title: *Specific agreement for the collaboration between the Puerta del Atlántico Consortium and the Museo Nacional de Ciencias Naturales (CSIC) for the research, protection, and popularization of the paleontological patrimony of the municipality of Móstoles*

Research Project, financed by Puerta del Atlántico Consortium

Organism: Departamento de Paleobiología, Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas)

Time frame: 2008

Principal researcher: J. Morales Romero (CSIC)

Title: *Influence of global climatic changes on the predator-prey interactions in mammalian communities during the Neogene-Quaternary of the Iberian Peninsula, Eastern Africa and the Pampean Region*

Research Project CGL 2006-01773/BTE, financed by the Spanish Ministerio de Educación y Ciencia

Organism: Departamento de Paleontología, Facultad de Ciencias Geológicas (Universidad Complutense de Madrid)

Time frame: 2006-2009

Principal researcher: M. Hernández Fernández (UCM)

Title: *Palaeoclimatology, palaecology and evolution of the mammalian faunas from the Upper Neogene of the Iberian Peninsula and Western Africa: analysis on the influence of global climatic shifts in mammalian biodiversity*

Research Project RyC 2005-CT-08, financed by the Spanish Ministerio de Educación y Ciencia

Organism: Departamento de Paleontología, Facultad de Ciencias Geológicas (Universidad Complutense de Madrid)

Time frame: 2005-2007

Principal researcher: M. Hernández Fernández (UCM)

Title: *Geology and Paleontology of the continental upper Miocene fossil sites from the pseudokarstic system of Cerro de los Batallones, Madrid Basin*

Research Project MCYT-CGL 2005- 03900/BTE, financed by the Spanish Ministerio de Educación y Ciencia

Organism: Departamento de Paleobiología, Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas)

Time frame: 2005-2008

Principal researcher: J. Morales Romero (CSIC)

Title: *Ecostratigraphic correlation and comparative analysis of the climatic changes in the Iberian Peninsula and East Africa during the Plio-Pleistocene*

Research Project PR1/06-14470-B, financed by Universidad Complutense de Madrid

Organism: Departamento de Paleontología, Facultad de Ciencias Geológicas (Universidad Complutense de Madrid)

Time frame: 2006

Principal researcher: M. Hernández Fernández (UCM)

Title: *The continental upper Miocene fossil sites system from Cerro de los Batallones, Madrid, Spain: geological, taphonomical and palaeobiological study of an exceptional case of fossil vertebrates accumulation*

Research Project BTE2002-00410, financed by the Spanish Ministerio de Ciencia y Tecnología

Organism: Departamento de Paleobiología, Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas)

Time frame: 2002-2005

Principal researcher: J. Morales Romero (CSIC)

Teaching

Since 2018, I teach *Paleoecology, Macroevolution and Diversification* (Environmental Sciences degree) and *Ecology* (Biology degree) at the Universidad de Alcalá. **296 hours**

2013-2022 *The use of phylogenies in the study of macroevolution.*
Transmitting Science. Hostalets de Pierola. [total of **400 hours**]

2009-2011. Seminar “Phylogenetic character reconstruction” for the course

“Methods in the study of Evolutionary Biology”. Master de Biología Evolutiva, Universidad Complutense de Madrid (UCM)

Seminars

- 2021 - Simon Fraser University, Canada
- 2021 - Universidad Rey Juan Carlos, Spain
- 2020 - Bristol University, Spain
- 2020 - Universidad Rey Juan Carlos, Spain
- 2019 - Universidad de Alcalá, Spain
- 2019 - Sao Paulo University, Brasil

Field work in paleontological excavations

- 2005 - 2013 Instructor in the excavations of the Upper Miocene (Vallesian) fossil site of Cerro de los Batallones. Dir: Dr. Jorge Morales Romero.
National Museum of Natural Sciences.
- 2007 - 2013 Instructor in the excavations of the Middle Miocene (Aragonian) fossil site of Somosaguas, Pozuelo de Alarcón (Madrid).
Dir: Dra. Nieves López Martínez
Universidad Complutense de Madrid
- 2007 Participation in the excavations of the fossil site of Toril-3A (Daroca, Zaragoza). Dir: Dra. Beatriz Azanza Asensio
Universidad de Zaragoza

Direction of paleontological excavations

- 2008 - 2010, 2013 Co-director of the excavations of the Middle Miocene (Aragonian) fossil site of Somosaguas, Pozuelo de Alarcón (Madrid).
Universidad Complutense de Madrid.

Software knowledge

Windows (XP,Vista...)	SPSS
Mac OSX	Statgraphics
Microsoft Word	Mesquite
Microsoft Power Point	MacClade
Microsoft Excel	MrBayes
Pages	BayesTraits
Keynote	R (packages: paleotree, ape, diversitree, LASER, TreePar...)

InDesign	Tree Edit
Illustrator	Lagrange
Photoshop	TNT
Aperture	Endnote

I also have expertise in the application of modern computational methods for the analysis of large palaeontological datasets (e.g. the NOW Database, MIOMAP and the Paleobiology Database).

Languages

	Read	Write	Speak
Spanish	native	native	native
English	correct	correct	correct
French	well	medium	well
German	basic	basic	basic

Certificate in Advanced English (CAE) Score: 75/100

Other merits

2003 - 2004 Collaboration with the Vertebrates Museum of the Department of Zoology and Physical Anthropology. Fac. of Biological Sciences, Universidad Complutense de Madrid.

2004 Volunteered for ASVO project in Playa Caletas for the Conservation of the sea turtles (Caletas Beach, Guanacaste, Costa Rica)

2005 Editing the pamphlet *Entomological Guide of the Alfonso XIII Royal Botanic Garden* (Universidad Complutense de Madrid).

2006 Teacher Training Course (CAP); 250 of teaching hours in high school (Madrid).