MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Cofinanciado por la Unión Europea

AGENCIA ESTATAL DE INVESTIGACIÓN

CURRICULUM VITAE

CV date	28 April 2025

Part A. PERSONAL INFORMATION

First name	José Ignacio		
Family name	Márquez Corro		
Gender (*)	Male	Birth date (dd/mm/yyyy)	14/12/1992
Social Security, Passport, ID number	30268734K		
e-mail	jimarcorr@gmail.com	URL Web	https://jimarcor.github.io/
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-4277-2933	

(*) Mandatory

A.1. Current position

Position	Postdoctoral Researcher – Junta de Andalucía		
Initial date	April 2025		
Institution	Universidad Pablo de Olavide		
Department/Center	Molecular Biology and Biochemical Engineering		
Country	Spain	Teleph. number	+34 637 076 829
Keywords	Biodiversity, Conservation, Cyperaceae, Evolution, Genomics, Systematics, Taxonomy		

A.2. Previous positions (research activity interruptions, see call)

Period	Position/Institution/Country/Interruption cause
July 2024 – April 2025	Postdoctoral Researcher – The Global Cyperaceae Database (GCypD) / Univ. Pablo de Olavide / Spain / new contract
May 2023 – May 2024	Research Assistant – Darwin Tree of Life / RBG Kew / UK / new contract
Jan 2022 – May 2023	'Margarita Salas' Postdoctoral Fellow / RBG Kew / UK / new contract
Jun 2021 – Dec 2021	'POP' Postdoctoral Fellow / Univ. Pablo de Olavide / Spain / new contract
July 2018 – Jun 2021	'FPI' Predoctoral Fellow / Univ. Pablo de Olavide / Spain / contract change
Jan 2017 – Jun 2018	Research Assistant / Univ. Pablo de Olavide / Spain / new contract
Oct 2016 – Dec 2016	Research Assistant / Univ. Pablo de Olavide / Spain / new contract

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Doctorate (PhD) Environment and Society	Universidad Pablo de Olavide (Seville, Spain)	2021
Master (MSc) Biodiversity and Conservation Biology	Universidad Pablo de Olavide (Seville, Spain)	2015
Degree (BSc) Environmental Sciences	Universidad Pablo de Olavide (Seville, Spain)	2014

Part B. CV SUMMARY *(max. 5000 characters, including spaces) to complete this section, please read carefully: "**Instructions to fill CVA**"*

The applicant's career is characterised by **multidisciplinarity**. In his research, the applicant combines traditional taxonomical skills with state-of-the-art bioinformatic and genomics techniques in the **sedge family (Cyperaceae)**. This is exemplified by the wide range of Botany-related fields the applicant has worked on: conservation, taxonomy, systematics, biogeography, phylogenetics, diversification, trait evolution, or genomics. Working in these fields, the applicant has participated in eight international collaborative projects and has been granted two international competitive small projects in which the applicant's role was mostly focused on trait evolution and its impact on diversification. Overall, the applicant's career is focused on studying **systematics** and the **evolutionary history of sedges,** with a special lean towards poorly collected areas to **improve conservation** programs.

Regarding scientific output, the applicant has published 36 scientific articles (31 in high-impact international journals), 2 book chapters, 3 books, and 1 IUCN red list assessment. The applicant has an h-index of 13 with 681 citations (on 28th April 2025). Moreover, the applicant has reviewed 16 manuscripts for high-impact journals, 3 projects for the Czech Science Foundation, has been selected as the committee for the international mention to 1 PhD thesis, and 2 IUCN red list assessments.

The applicant has organised **fieldwork** within the Iberian Peninsula and abroad (Mascarene islands, South Africa, Brazil, Madagascar, Chile, the United Kingdom, Ireland, and the Philippines). It is worth mentioning the trips to Mascarene islands or South Africa, which lasted two weeks each and were the first fieldwork led completely by the applicant. The trip to Chile and the Philippines lasted over one month and a half each. During these fieldwork trips, the applicant could visit 16 **herbaria** in seven different countries.

The applicant has a long record of **international collaborative work**. He is a member of the Global *Carex* Group international consortium, which includes researchers who work with the genus *Carex* (Cyperaceae). Moreover, the applicant was also one of the founders of the International Sedge Society, which also aims to establish international collaborations among sedge researchers. Such international collaboration has led to the publication of scientific articles of outstanding impacts (70% of the CV), some led by the applicant. Additionally, he has contacted and started new collaborations with researchers from Southeast Asia (Singapore, Thailand, Philippines, Vietnam) to continue sedge research in regions that are still little known taxonomically.

The applicant is also aware of the important element of disseminating science. There are several events where the applicant shared a leading role for **outreach** purposes. The applicant was one of the organizers of the 2021 Bioblitz of Spanish Flora, which continued occurring annually and involved over 2000 people across the entire country. This was organised as part of the applicant's participation in the "Group of Taxonomy, Systematics and Evolution (GTSE)" of the Spanish Botanical Society where the applicant is an active member. Moreover, the applicant has also organised two fieldwork activities to disseminate botanic knowledge and enhance scientific connections within the Iberian Peninsula in an event named "SEBOTA". Additional outreach was conducted in Madrid and Sevilla for this and other events focusing on citizen science. Moreover, during the postdoc phase, the applicant also contributed to outreach activities during his contract with RBG Kew, where he carried out dissemination talks during his fieldwork across the United Kingdom and Ireland about the importance of genomic data to preserve biodiversity. The applicant has also given invited talks to seminars in different labs, such as the Univ. Federal de Pernambuco (Brazil), RBG Kew (UK), Univ. de Sevilla (Spain) or Univ. Pablo de Olavide (Spain).

Regarding **lecturing and training**, the applicant lectured at Universidad Pablo de Olavide a total of 19.44 ECTS in Botany, Conservation Biology and Ecological Restoration, and also mentored several interns and end-of-degree projects of BSc and MSc students in the Botany area. The applicant was also a teaching assistant on the Madagascar field trip in 2022 corresponding to the MSc Plant and Fungal Taxonomy, Diversity and Conservation, in collaboration with RBG Kew, Queen Mary University of London and Kew Madagascar Conservation Centre. Moreover, the applicant has also trained 12 international research visitors coming to RBG Kew in flow cytometry and karyotype characterization. The applicant has also exchanged students, with special mention to a student in the Univ. de Concepción (Chile) and a student visiting the RBG, Kew (UK) to do a PhD stay with the applicant for over a month. These two students are already exceptional in their careers and will suppose a two-way beneficial collaboration.

Part C. RELEVANT MERITS

C.1. Publications

1. Shabdin, Z., **JI Márquez-Corro***, I Larridon, DA Simpson, A Culham. *Corresponding author. 2025. Phylogeny of Southeast Asian *Mapania* (Cyperaceae: Mapanioideae) using chloroplast sequence data. Botanical Journal of the Linnean Society 00: 000. doi: 10.1093/botlinnean/boaf001. **CiteScore (Scopus): 5.7 (Q1).**

2. Tribble, CM*, **JI Márquez-Corro***, MR May, AL Hipp, M Escudero, R Zenil-Ferguson. *Co-first authors. 2024. Macroevolutionary inference of complex modes of chromosomal speciation in a cosmopolitan plant lineage. New Phytologist 245: 2350–2361. doi: 10.1111/nph.20353. **CiteScore (Scopus): 17.6 (Q1).**

3. **Márquez-Corro, JI***, P Muñoz-Schüler, DN Penneckamp (…) J Pellicer. *Corresponding author (**1**/11) 2023. IAPT chromosome data 40/7. In: Marhold K, J Kucera (eds.), *IAPT/IOPB chromosome data 40*. Taxon 72(6): 1388–1389. doi: 10.1002/tax.13102. **CiteScore (Scopus): 3.8 (Q1).**

4. **Márquez-Corro, JI**, S Martín-Bravo, JL Blanco-Pastor, M Luceño, M Escudero. 2023. The holocentric chromosome microevolution: from phylogeographic patterns to genomic associations with environmental gradients. Molecular Ecology 33: e17156. doi: 10.1111/mec.17156. **CiteScore (Scopus): 9.4 (Q1).**

5. Elliott, TL, D Spalink, I Larridon (...) AM Muasya*. *Corresponding author (**9**/22). 2023. Global analysis of Poales diversification – parallel evolution in space and time into open and closed habitats. New Phytologist 242: 727–743. doi: 10.1111/nph.19421. **CiteScore (Scopus): 17.6 (Q1).**

6. Luceño M*, T Villaverde*, **JI Márquez-Corro** (...) S Martín-Bravo. *Corresponding authors (**3**/12). 2021. An integrative monograph of *Carex* section *Schoenoxiphium* (Cyperaceae). PeerJ 9: e11336. doi: 10.7717/peerj.11336. **CiteScore (Scopus): 5.1 (Q1).**

7. **Márquez-Corro JI***, S Martín-Bravo, P Jiménez-Mejías (...) M Escudero. *Corresponding author (**1**/9) 2021. Macroevolutionary insights in sedges (*Carex*: Cyperaceae): The effects of rapid chromosome number evolution on lineage diversification. Journal of Systematics and Evolution 59(4): 776–790. doi: 10.1111/jse.12730. **CiteScore (Scopus): 7.4 (Q1).**

8. Larridon I*, D Spalink, P Jiménez-Mejías, **JI Márquez-Corro**, S Martín-Bravo, AM Muasya, M Escudero. 2021. The evolutionary history of sedges (Cyperaceae) in Madagascar. Journal of Biogeography 48(4): 917–932. doi: 10.1111/jbi.14048. **CiteScore (Scopus): 7.5 (Q1).**

9. **Márquez-Corro JI***, S Martín-Bravo, D Spalink, M Luceño, M Escudero. 2019. Inferring hypothesis-based transitions in clade-specific models of chromosome number evolution in sedges (Cyperaceae). Molecular Phylogenetics and Evolution 135(4): 203–209. doi: 10.1016/j.ympev.2019.03.006. **CiteScore (Scopus): 8.6 (Q1).**

10. **Márquez-Corro JI***, M Luceño*, P Jiménez-Mejías (...) R Naczi. *Corresponding authors (**1**/11). 2018. Cyperaceae. In: Marhold K, J Kucera (eds.), *IAPT/IOPB chromosome data 28*. Taxon 67(6): 1240–1242. doi: 10.12705/676.39. **CiteScore (Scopus): 3.8 (Q1).**

C.2. Congress Please, include the modality of your participation (invited conference, oral presentation, poster)

Oral presentation: **Márquez-Corro JI**, P Jiménez-Mejías, M Uy, DA Simpson, I Larridon. 2024. Towards the consolidation of the Southeast Asian sedge knowledge. *XX International Botanical Congress (XX IBC)*. International Conference in Madrid (Spain) from 21–27 July 2024.

Poster: **Márquez-Corro JI**, P Jiménez-Mejías, M Uy, DA Simpson, I Larridon. 2023. A perspective of the future of SE Asian sedges: opportunities in an almost unexplored field. *State of the World's Plants and Fungi Symposium*. International Conference held at Royal Botanic Gardens, Kew (London, UK) from 11–13 Oct 2023.

Poster: **Márquez-Corro JI**, J Viruel, P Jiménez-Mejías, I Larridon. 2022. Ploidy level variation in Cyperaceae (Poales) family estimated with High-Throughput Sequencing data. *III Simposio de la Sociedad Española de Botánica*. National Conference held at Institut Botanic de Barcelona (Spain) from 25–26 Nov 2022.

Poster: **Márquez-Corro JI**, M Escudero, S Martín-Bravo, M Luceño. 2019. A phylogeographic study of the influence of chromosome number variation in the microevolution of species (*Carex* gr. *laevigata*, Cyperaceae). *9th Biennial Conference of the International Biogeography Society*. International Conference by the International Biogeography Society in Málaga (Spain) from 8–12 Jan 2019.

Oral presentation: **Márquez-Corro JI**, M Escudero, P Jiménez-Mejías, S Martín-Bravo, Luceño M. 2018. Holocentric chromosome evolution and its impact on diversification, with special emphasis on sedges (Cyperaceae). *6th International Conference on Comparative Biology of Monocotyledons – MONOCOTS VI*. International Conference in Natal (Brazil) from 7–12 Oct 2018.

C.3. Research projects

(must indicate their personal contribution, and lines of research for which they have been responsible

- PID2023-147332NB-I00, Natural vs anthropogenic colonization from the Northern to the Southern Hemisphere: a comparative approach using amphitropical *Carex* (Cyperaceae). Ministerio de Ciencia e Innovación. PI: Santiago Martín-Bravo, Pedro Jiménez-Mejías. Universidad Pablo de Olavide. 01/09/2024–31/08/2027. 222.500€. **Position: Researcher** (working team).

- CNS2023-143665, *Making biodiversity knowledge available: an integrative, appealing and dynamic digital dashboard for Carex, Cyperaceae (iSedge)*. Ministerio de Ciencia e Innovación. PI: Pedro Jiménez-Mejías. Universidad Pablo de Olavide. 01/03/2024–28/02/2026. 198.634€. **Position: Researcher** (working team).

- BMT6-2023. Bentham-Moxon Trust 2023. *The future of the Southeast Asian sedge flora (Carex, Cyperaceae)*. Royal Botanic Gardens, Kew. £4.050. **Position: PI**.

- 226458/Z/22/Z. *Darwin Tree of Life – Phase 2*. Wellcome Sanger Institute. 01/11/2022–31/10/2024. PI: Mark Blaxer, Co-PI: Paul Kersey. Wellcome Sanger Insitute. £2.500.000 (Royal Botanic Gardens, Kew. £196.229). **Position: Researcher** (working team).

- IAPT Research Grant 2022, *Towards an integrative study of Carex sect. Uncinia in South America: completing a mosaic of diversification processes in the Chilean Andes*. International Association for Plant Taxonomy. $2.000. **Position: PI**.

- PID2020-113897GB-I00, *Exploring plant evolutionary radiations. A comparative approach using the Gondwanan Disjunction America-New Zealand in Carex (DANZ).* Ministerio de Ciencia e Innovación. PI: Pedro Jiménez-Mejías (Universidad Autónoma de Madrid). 01/09/2021–30/08/2024. 183.073€. **Position: Researcher** (working team).

- SI1/PJI/2019-00333, *Macondo: génesis de biodiversidad en escenarios de cambio climático*. Ayudas a proyectos de I+D para jóvenes investigadores de la Universidad Autónoma de Madrid. PI: Pedro Jiménez-Mejías (Universidad Autónoma de Madrid). 01/01/2020–31/12/2021. 48.000€. **Position: Researcher** (working team).

- CGL2016-77401-P, *Genomics as a tool for the study of evolution and biodiversity in the megadiverse genus Carex (Cyperaceae)*. Ministerio de Economía y Competitividad. PI: Modesto Luceño Garcés (Universidad Pablo de Olavide). 30/12/2016–29/12/2019. 113.340€. **Position: Research team** (FPI predoctoral researcher).

C.4. Contracts, technological or transfer merits

- Research assistant (Titulado Superior de Apoyo a la Investigación). Universidad Pablo de Olavide (Jan 2017–Jun 2018). Supervisor: Modesto Luceño Garcés. Topic: Evolutionary studies in holocentric organisms.
- Research assistant (Titulado Superior de Apoyo a la Investigación). Universidad Pablo de Olavide (Oct–Dec 2016). Supervisor: Modesto Luceño Garcés. Topic: Herbarium technician.
- Research assistant scholarship. Universidad Pablo de Olavide (Feb–Jul 2014). Supervisor: Modesto Luceño Garcés. Topic: Morphological studies of *Carex* sect. *Schoenoxiphium*.