Fecha del CVA	07/01/2023

Parte A. DATOS PERSONALES

Nombre	Pedro		
Apellidos	Jordano Barbudo		
Sexo	Hombre	Fecha de Nacimiento	23/07/1957
DNI/NIE/Pasaporte			
URL Web	http://pjordanolab.ebd.csic.es		
Dirección Email	jordano@ebd.csic.es		
Open Researcher and Contributor ID (ORCID)	0000-0003-2142-9116		

A.1. Situación profesional actual

Puesto	Profesor de Investigación		
Fecha inicio	2011		
Organismo / Institución	Consejo Superior de Investigaciones Científicas		
Departamento / Centro	Ecología Integrativa / Estación Biológica de Doñana		
País		Teléfono	
Palabras clave			

A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
Doctorado en Biología Vegetal y Ecología	Universidad de Sevilla	1984
Licenciado en Ciencias	Universidad de Córdoba	1978

Parte B. RESUMEN DEL CV

My research focuses on the study of biological diversity from both ecological and evolutionary perspectives. I am interested in how ecological interactions shape complex ecological systems. Over the years my research lines have unfolded an interdisciplinary approach, including botany, zoology, population genetics, statistics, and theoretical models.

My main scientific achievements include incorporating complex network analysis in the study of functions, and consequences of plant-animal mutualisms within ecosystems. This represented a pathbreaking approach to the study of coevolution in mega-diversity ecosystems such as tropical forests. I have also developed molecular tools to track and measure seed dispersal distances by frugivorous animals, and the identity of the frugivore species dispersing seeds. The approach is based on using maternally-derived tissue (i.e., endocarp) attached to the seed to characterize the maternal (source tree) genotype with microsatellite markers, and DNA- barcoding dispersed seeds to identify frugivore species (from DNA remains of the animal on the seed surface). This has represented a major methodological advance in the study of dispersal systems, and a key innovation for future developments that link population genetics, metapopulation ecology, and dispersal ecology.

I have authored more than 283 scientific papers and four books, with >35000 citations (h= 89). Supervised 23 Post-doctoral fellowships, 16 PhD theses (plus 3 ongoing), and 11 Master theses. I participate in several university courses, within the PhD and graduate programs at Univ. Pablo de Olavide (director of the Master Course “Biodiversidad y Biología de la Conservación”) and Univ. Sevilla (Spain) (PhD program Programa de Doctorado en Biología Integrada, where I am associate professor), teaching courses on coevolution, plant-animal interactions, and statistics with R. I am external professor within the Ciência sem Fronteiras Program (Brazil) for the Programa Pós-graduação em Biodiversidade e Ecologia, UNESP (Brazil).

I chaired the Spanish panel for the National Research Plan, program of Biodiversity, Ecology and Global Change, Ministerio de Economía e Innovación (2006-2013); from 2018 I chair the Environmental Sciences and Technologies area of the National Science Agency. Chair of the Starting Grants panel at the European Research Council (Brussels) (2012-2016; vice-

chair 2008-2011). I served as representative person of the Spanish Ministry of Science and Innovation for EraNet-BIODIVERSA and the EuroCores EuroDiversity initiative of the European Science Foundation. Jury member for the BBVA Frontiers of Knowledge Awards (2008-2010, 2012-2015). Member of the editorial boards for: Annual Reviews of Ecology, Evolution, and Systematics; PLoS Biology; Perspect. Plant Ecology, Evolution, and Systematics; Movement Ecology.

Awards

- Corresponding member, Real Academia de Ciencias Exactas, Físicas y Naturales, Spain. Sept 2019. Elected numerary member in Oct. 2020.
- National Science Research Award in the area of Environmental Sciences and Technologies, 2018. Ministry of Science, Universities, and Innovation, Spain.
- Ecosistemas-Luis Balaguer Award to a professional career in ecology. Sociedad Española de Ecología, Spain. 2018.
- Rey Jaime I Award in the area of Environmental Sciences and Conservation. 2014. Awarded by the Generalitat de Valencia.
- British Ecological Society: Marsh Award (best book in ecology) for Mutualistic Networks, Princeton Univ. Press (2014).
- Honorary professor. University of Sevilla, Spain. Since 2009.
- Mercer Award, Ecological Society of America. 2008.
- Three of his supervised PhD theses obtained the Excellence Award, Univ. Sevilla (2), Univ. La Laguna (1), Spain. One supervised PhD thesis awarded with the best Doctoral Thesis in Brazil, 2007. - Included in SCI (Web of Science) in the list "Most influential Scientific Minds", years 2015 to 2021.

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

1 **Artículo científico**. Campo-Celada, María; Jordano, Pedro; Benítez-López, Ana; Gutiérrez-Expósito, Carlos; Rabadán-González, Julio; Mendoza, Irene. 2022. Assessing short and long-term variations in diversity, timing and body condition of frugivorous birds Oikos. 2022-2. ISSN 0030-1299.

2 **Artículo científico**. Isla, Jorge; Jacome-Flores, Miguel E.; Pareja, Daniel; Jordano, Pedro. 2022. Drivers of individual-based, antagonistic interaction networks during plant range expansion Journal of Ecology. ISSN 0022-0477.

3 **Artículo científico**. Fuzessy, Lisieux; Silveira, Fernando A. O.; Culot, Laurence; Jordano, Pedro; Verdú, Miguel. 2022. Phylogenetic congruence between Neotropical primates and plants is driven by frugivory Ecology Letters. 25-2, pp.320-329. ISSN 1461-023X.

4 **Artículo científico**. Arroyo-Correa, Blanca; Bartomeus, Ignasi; Jordano, Pedro. 2021. Individual-based plant-pollinator networks are structured by phenotypic and microsite plant traits JOURNAL OF ECOLOGY. 109-8, pp.2832-2844. ISSN 0022-0477.

5 **Artículo científico**. Quintero, Elena; Isla, Jorge; Jordano, Pedro. 2021. Methodological overview and data-merging approaches in the study of plant–frugivore interactions Oikos. ISSN 0030-1299.

6 **Artículo científico**. Elena Quintero; Marco A. Pizo; Pedro Jordano. 2020. Fruit resource provisioning for avian frugivores: The overlooked side of effectiveness in seed dispersal mutualisms Journal of Ecology. 108-4, pp.1358-1372.

7 **Artículo científico**. Moleón, Marcos; Sánchez-Zapata, José A.; Donázar, José A.; et al; Tockner, Klement. 2020. Rethinking megafauna Proceedings of the Royal Society B: Biological Sciences. 287-1922, pp.20192643-20192643.

8 **Artículo científico**. Alfredo Valido; Candelaria Rodríguez Rodríguez; Pedro Jordano. 2019. Honeybees disrupt the structure and functionality of plant-pollinator networks Scientific Reports. 9, pp.4711.

9 **Artículo científico**. C. Emer; M. Galetti; M.A. Pizo; P.R. Guimarães Jr.; S. Moraes; A. Piratelli; P. Jordano. 2018. Seed-dispersal in a fragmented hotspot of biodiversity - a metanetwork approach Ecology Letters. 21, pp.484-493. https://doi.org/10.1111/ele.12909

10 **Artículo científico**. Schupp, Eugene W.; Jordano, Pedro; G{ó}mez, Jos{é} Mar{í}a. 2017. A general framework for effectiveness concepts in mutualisms Ecology Letters. 20, pp.577-590. ISSN 14610248, ISBN 1972952943.

11 **Artículo científico**. Guimar{\~{a}}es, Paulo R.; Pires, Mathias M.; Jordano, Pedro; Bascompte, Jordi; Thompson, John N.2017. Indirect effects drive coevolution in mutualistic networks Nature. Nature Publishing Group. 550-7677, pp.511-514. ISSN 14764687.

12 **Artículo científico**. Jordano, Pedro. 2017. What is long-distance dispersal? And a taxonomy of dispersal events Journal of Ecology. 105-1, pp.75-84. ISSN 13652745, ISBN 1365-2745.

13 **Artículo científico**. Garcia, Cristina; Klein, Etienne K; Jordano, Pedro. 2016. Dispersal processes driving plant movement: challenges for understanding and predicting range shifts in a changing world Journal of Ecology. 105-1, pp.1-5.

14 **Artículo científico**. Jordano, Pedro. 2016. Sampling ecological networks Functional Ecology. 00, pp.000-000.

15 **Artículo científico**. Bello, C; Galetti, M; Pizo, M. A.; et al; Jordano, P. 2015. Defaunation affects carbon storage in tropical forests Science Advances. 1-11, pp.e1501105-e1501105.

16 **Artículo científico**. Font{\'u}rbel, Francisco E; Jordano, Pedro; Medel, Rodrigo. 2015. Scale-dependent responses of pollination and seed dispersal mutualisms in a habitat transformation scenario Journal of Ecology. 103-5, pp.1334-1343.

17 **Artículo científico**. P{\'e}rez-M{\'e}ndez, N{\'e}stor; Jordano, Pedro; Valido, Alfredo. 2015. {Downsized mutualisms: Consequences of seed dispersers{\textquoteright} body-size reduction for early plant recruitment} Perspectives In Plant Ecology Evolution And Systematics. 17-2, pp.151-159.

18 **Artículo científico**. Juan Pedro González-Varo; Juan Miguel Arroyo Salas; Pedro Jordano Barbudo. 2014. Who dispersed the seeds? The use of DNA barcoding in frugivory and seed dispersal studies Methods in Ecology and Evolution. 5, pp.806-814.

19 **Artículo científico**. M. Galetti; R. Guevara; M. Côrtes; et al;. 2013. Functional extinction of birds drives rapid evolutionary changes in seed size Science. 340-6136, pp.1086-1090.

20 **Artículo científico**. Guimaraes Jr., P.R.; Galetti, M.; Jordano, P.2008. Seed dispersal anachronisms: Rethinking the fruits extinct megafauna ate PLoS ONE. 3-3.

21 **Artículo científico**. García, C.; Jordano, P.; Godoy, J.A.2007. Contemporary pollen and seed dispersal in a Prunus mahaleb population: Patterns in distance and direction Molecular Ecology. 16-9, pp.1947-1955.

22 **Artículo científico**. Jordano, P.; García, C.; Godoy, J.A.; García-Castaño, J.L.2007. Differential contribution of frugivores to complex seed dispersal patterns Proceedings of the National Academy of Sciences of the United States of America. 104-9, pp.3278-3282.

23 **Artículo científico**. Rezende, E.L.; Lavabre, J.E.; Guimarães Jr., P.R.; Jordano, P.; Bascompte, J.2007. Non-random coextinctions in phylogenetically structured mutualistic networks Nature. 448-7156, pp.925-928.

24 **Artículo científico**. Bascompte, J.; Jordano, P.2007. Plant-animal mutualistic networks: The architecture of biodiversity Annual Review of Ecology, Evolution, and Systematics. 38, pp.567-593.

25 **Artículo científico**. Bascompte, J.; Jordano, P.; Olesen, J.M.2006. Asymmetric coevolutionary networks facilitate biodiversity maintenance Science. 312-5772, pp.431-433.

26 **Artículo científico**. Jordano, P.; Bascompte, J.; Olesen, J.M.2003. Invariant properties in coevolutionary networks of plant-animal interactions Ecology Letters. 6-1, pp.69-81.

27 **Artículo científico**. Bascompte, J.; Jordano, P.; Melián, C.J.; Olesen, J.M.2003. The nested assembly of plant-animal mutualistic networks Proceedings of the National Academy of Sciences of the United States of America. 100-16, pp.9383-9387.

28 **Artículo científico**. Godoy, J.A.; Jordano, P.2001. Seed dispersal by animals: Exact identification of source trees with endocarp DNA microsatellites Molecular Ecology. 10-9, pp.2275-2283.

29 **Artículo científico**. Jordano, P.1987. Patterns of mutualistic interactions in pollination and seed dispersal: connectance, dependence asymmetries, and coevolution.American Naturalist. 129-5, pp.657-677.

30 **Capítulo de libro**. 2014. Fruits and frugivory Seeds: the ecology of regeneration of plant communities. CAB International. pp.18-61.

31 **Libro o monografía científica**. J. Bascompte; P. Jordano. 2014. Mutualistic networks Monographs in Population Biology Series. Princeton University Press.

C.3. Proyectos o líneas de investigación

1 **Proyecto**. Ecological webs: from interaction motifs to large multilayer networks (ECOWEBS)-P20_00736. (Estación Biológica de Doñana). 01/07/2021-31/12/2023. 124.600 €.

2 **Proyecto**. eLabs-BioINTERACT: ecological interactions as Biodiversity and ecosystem service components. (Estación Biológica de Doñana). 01/01/2021-31/12/2023. 989.720 €.

3 **Proyecto**. CGL2017-82847-P, Dispersal by animal frugivores and range expansion in plants: a multilayer network approach. DISPMULTLAYER. Ministerio de Economía y Competitividad, Plan Nacional I+D+i. Pedro Jordano. (Estación Biológica de Doñana). 01/02/2018-01/03/2022. 200.000 €. Coordinador.

4 **Proyecto**. MSCA-IF-798269, Climate change and phenology: long-term temporal dynamics of mutualistic ecological networks. TEMPNET. EUROPEAN COMMISSION Horizon 2020-Research and Innovation Framework Programme. MSCA-IF-EF-RI. Irene Mendoza. (Estación Biológica de Doñana). 01/10/2018-01/10/2020. 170.121 €.

5 **Proyecto**. Consequencias ecológicas da defaunação na Mata Atlantica. FAPESP. Mauro Galetti. (UNESP). 31/12/2014-31/12/2019. 164.000 €.

6 **Proyecto**. Dispersión a larga distancia por animales y conectividad entre poblaciones de plantas insulares: La extinción de los mutualismos y sus consecuencias. Pedro Jordano Barbudo. (Estación Biológica de Doñana). 01/10/2014-01/10/2017. 184.000 €.

7 **Proyecto**. PIOF-GA-2011-301119 Holocentric chromosome evolution and the origins of biodiversity in a hyper-diverse plant lineage HOLOCHROMEVOL. Marie Curie International Outgoing Fellowship. Pedro Jordano Barbudo. (Estación Biológica de Doñana). 10/01/2013-30/04/2015. 149.000 €. Coordinador.

8 **Proyecto**. RNM-5731, Interacciones Mutualistas Planta-Animal: Procesos Ecológicos de Dispersión y Consecuencias Demogenéticas. Consejería de Innovación y Ciencia de la Junta de Andalucía. (Estación Biológica de Doñana). 2010-2014. 278.242 €.

9 **Proyecto**. P18-HO-4814, BIODIVERSITY'S INTERACTOME: THE FUNCTIONAL FRAMEWORK OF SPECIES INTERACTIONS. Ayudas A La I+d+i, en el Ámbito del Plan Andaluz de Investigación, Desarrollo e Innovación (PAIDI 2020). (Estación Biológica de Doñana). Desde 27/02/2020. 50.000 €. Coordinador.

10 **Proyecto**. Programa Ciência Sem Fronteiras. Brazil.; CNPq; Conselho Nacional de Pesquisa. Pedro Jordano. (Dept. Ecologia, UNESP). Desde 2013. 189.000 €.

11 **Proyecto**. CGL2010-18381, PERSISTING AT THE LIMIT: GENETIC STRUCTURE, HYBRIDISATION AND CONSERVATION OF QUERCUS ROBUR L. RELICT POPULATIONS AT THE SPECIES¿ SOUTHERN RANGE MARGIN. Ministerio de Ciencia e Innovación. Arndt Hampe. (Estación Biológica de Doñana). Desde 01/01/2011. 185.000 €.