

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Juan		
Family name	Arroyo Marín		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*)	orcid.org/0000-0003-4749-2519		

(*) Mandatory

A.1. Current position

Position	Full Professor		
Initial date	01/10/2007		
Institution	University of Seville		
Department/Center	Plant Biology and Ecology	School of Biology	
Country	Spain	Teleph. number	
Key words	Plant reproductive ecology and evolution, Biogeography, Biodiversity		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1981-1983	Hired collaborator O.M. 21/10/82, Full time, Univ Seville, Spain
1983-1985	Practical demonstrator, Full time, Univ Seville, Spain
1986-1987	Hired collaborator, Full time, Univ Seville, Spain
1987-2007	Associate Prof., Full time, Univ Seville, Spain
2007-present	Full Prof., Full time, Univ Seville, Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
BSc Biological Sciences	Univ Seville, Spain	1981
PhD Biological Sciences	Univ Seville, Spain	1985

Part B. CV SUMMARY (max. 5000 characters, including spaces)

I developed my career at the U of Seville (PhD with honor prize) where I devoted all my teaching and research duties, with some short postdocs and research leaves to Israel (Haifa Univ), Canada (Toronto Univ), México (UNAM), Cuba (IES) and Brazil (UNESP). After an initial interest in community ecology, I focused on plant reproductive ecology and evolution, and shortly after, in evolutionary plant biogeography. I have kept these topics during my career, which merged to understand the evolutionary mechanisms building up biodiversity hotspots. My main scientific contributions are (1) the most comprehensive test of the Darwinian hypothesis of the late D G Lloyd on the evolution of heterostyly at both macro- and microevolutionary levels, and (2) to develop an evolutionary framework for accounting biodiversity in hotspots.

Research contributions: I have published 170 papers in journals and books, 7383 citations, h=49 in Scholar (120 papers in WoS journals; >50% in Q1, 4238 citations, h=38). I leaded (PI) projects granted by national (18 MICINN-AECI, OAPN, TED), regional (5 Andalusian PAIDI-FEDER), and international (1 MSCA-GF) competitive calls, with a public investment of 2.5M €. I have been Chair of 2 international meetings (MEDECOS XIV-AEET XIII 2017 and SESBE VII 2020) and 2 symposia in international meetings (4th Iberian Ecological Congress 2015; Plant Reproductive Ecology in Mediterranean regions, MEDECOS XIV 2017). I have been invited to plenary talks in 3 national and 5 invited talks in international congresses. I have been invited member of the Scientific Committee of the XX International Botanical Congress in Madrid 2024, and of ESEB2025 in Barcelona and PHENO Meeting in Sao Paulo2025.

Contributions to society: I belong to the Scientific Committee of the Network of Andalusian Botanic Gardens in Protected Areas and the Scientific Committee of Northern Granada UNESCO Geopark. I participate in Global Alliance of Universities coordinated by UNESP (Brazil). I have developed 5 technical contracts with private and public companies. I have chaired a public exhibition about the Darwin Bicentenary (2009) and celebration book by the U of Seville.

Contributions to professional development: I lead the research group "Ecology, Evolution and Conservation of Biodiversity" <http://grupo.us.es/grnm210/web/> granted by the Andalusian Government. I have regularly acted as Expert Member panel of the Spanish R+D+i (CGL-BOS, 2006-19) committees for competitive research grants and careers and for National Parks Authority, ECODOCA-EU, CYTED, BBVA foundation and regional governments (Extremadura, Balearic Island and Valencia). I have been reviewer of grant and job proposals for foreign research agencies (ESF, ERC, NWO, ANR, CONYCET, BES-UK, FNP, CIRCLE, CNCS, FWO-ESF, NERC-UK, Royal Society, FNRS, Univ Plymouth, China Academy of Sciences, CINECA-Italy). I have been Associate Editor of "Plant Biology" journal (Wiley) during 14 years. Also, I was guest editor of 2 special issues of Plant Biology (Wiley, vol. 20 suppl. 2018, 22 papers; vol. 13 suppl, 2011, 16 papers) and of Environmental and Experimental Botany (Elsevier, January 2020, 10 papers) and AoBPlants (2024). I am member of the Managing Board of Peer Community in Evolutionary Biology, Botany Letters, Italian Botanist, Journal of Plant Research. I acted as regular reviewer for about 65 JCR journals (average 20 MSs/year) like Ecology Letters, Nature Plants, Evolution, New Phytologist, etc. I have received postdocs from Juan de la Cierva (7), MSCA (1), Ramón y Cajal (1), foreign young researchers MINECO (2), Andalusian government programmes (2) and CONACYT sabbatical stays (2). I have supervised 15 PhD students, most of them with a successful career (e.g., Full and Ass. Profs., and competitive postdocs). I have acted in about 50 PhD committees in Spain, UK, Italy and Portugal and committees for research and academic jobs at CSIC and Universities in Spain, UK, Israel and South Africa. I supervised 11 MSc theses. I have been founder and coordinator of the MSc in Evolutionary Biology (2010-2013) and of the PhD Programme in Integrative Biology (2013-2020) at U. of Seville. I have been actively involved in building-up the current double MSc & PhD in Biology UNAM (México)-U. of Seville. I was vice-Dean for research and postgraduate studies of the Biology School, U. of Seville (2011-14). I have been member-at-large (2018-21) and vice-President (2021-24) of SESBE council (Spain).

Recognitions: I hold 6 periods (x6 years) of positive evaluation of research and 1 period of knowledge transfer (CNEAI), and 8 periods (x5 years) of positive evaluation of teaching, and 5 positive periods from regional government. I have received the Fama (2018) prize to acknowledge research achievements in science fields at U. of Seville (1 out 5 per year).

Part C. RELEVANT MERITS (*sorted by typology*)

C.1. Publications (*see instructions*)

1. Simón-Porcar V, Escudero M, Santos-Gally R, Sauquet H, Schönenberger J, Johnson SD, **Arroyo J**. 2024 Convergent evolutionary patterns of heterostyly across angiosperms support the pollination-precision hypothesis. **Nature Communications** **15(1):1237**. <https://doi.org/10.1038/s41467-024-45118-0>
2. Novaes LR, Cornelissen T, **Arroyo J**, Simón-Porcar V. 2024 Meta-analyses of reproductive changes in angiosperm populations in response to elevation reveal a lack of global patterns. **Annals of Botany Apr 22:mcae062**. <https://doi.org/10.1093/aob/mcae062>

3. Simón-Porcar VI, Muñoz-Pajares AJ, de Castro A, **Arroyo J.** 2022 Direct evidence supporting Darwin's hypothesis of cross-pollination promoted by sex organ reciprocity. **New Phytologist** **235(5):2099-110**. <https://doi.org/10.1111/nph.18266>
4. Maguilla E, Escudero M, Ruíz-Martín J, **Arroyo J.** 2021 Origin and diversification of flax and their relationship with heterostyly across the range. **Journal of Biogeography** **48(8):1994-2007**. <https://doi.org/10.1111/jbi.14129>
5. Simón-Porcar VI, Meagher TR, **Arroyo J.** 2015 Disassortative mating prevails in style-dimorphic *Narcissus papyraceus* despite low reciprocity and compatibility of morphs. **Evolution** **69(9):2276-88**. <https://doi.org/10.1111/evo.12731>, <https://doi.org/10.1111/evo.12796>
6. Molina-Venegas R, Aparicio A, Lavergne S, **Arroyo J.** 2015 The building of a biodiversity hotspot across a land-bridge in the Mediterranean. **Proceedings of the Royal Society B: Biological Sciences** **282(1813):20151116**. <https://doi.org/10.1098/rspb.2015.1116>
7. Simón-Porcar VI, Santos-Gally R, **Arroyo J.** 2014 Long-tongued insects promote disassortative pollen transfer in style-dimorphic *Narcissus papyraceus* (Amaryllidaceae). **Journal of Ecology** **102(1):116-25**. <https://doi.org/10.1111/1365-2745.12179>
8. Pérez-Barrales R, Simón-Porcar VI, Santos-Gally R, **Arroyo J.** 2014 Phenotypic integration in style dimorphic daffodils (*Narcissus*, Amaryllidaceae) with different pollinators. **Philosophical Transactions of the Royal Society B: Biological Sciences** **369(1649):20130258**. <https://doi.org/10.1098/rstb.2013.0258>
9. Santos-Gally R, Gonzalez-Voyer A, Arroyo J. 2013 Deconstructing heterostyly: the evolutionary role of incompatibility system, pollinators, and floral architecture. **Evolution** **67(7):2072-82**. <https://doi.org/10.1111/evo.12087>
10. Rodríguez-Sánchez F, Pérez-Barrales R, Ojeda F, Vargas P, **Arroyo J.** 2008 The Strait of Gibraltar as a melting pot for plant biodiversity. **Quaternary Science Reviews** **27(23-24):2100-17**. <https://doi.org/10.1016/j.quascirev.2008.08.006>

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

1. **VII Congress of the Spanish Society of Evolutionary Biology (SESBE)**. 5-7 February 2020. Seville, Spain. 2020. Participation: **chair of the organizing committee**.
2. "Biogeography and ecology of style polymorphisms across spatial and temporal scales in the Mediterranean". **XIX International Botanical Congress**. 23-29 July 2017. Shenzhen, China. Participation: **invited talk**.
3. **XIV MEDECOS & XIII AEET meeting**. 31 January-4 February 2017. Seville, Spain. Participation: **chair of the organizing committee**.
4. "Using systematics for conservation of biodiversity and underlying ecological and evolutionary processes". **III International Plant Science Conference (IPSC)**. Italian Botanical Society. 21-23 September 2016. Rome, Italy. Participation: **invited conference (plenary talk)**.
5. International Congress **Modern Phylogenetic Comparative Methods and their Application in Evolutionary Biology**. 11-15 November 2014. Seville, Spain. Participation: **co-chair of the Organizing Committee**.
6. "Anatomy of Mediterranean biodiversity hotspot". Seminar series **"Frontiers in Ecology and Evolution 2014"**. Institute of Ecology, UNAM, Mexico. Participation: **invited lecture**.
7. "A unique flora in two continents. An evolutionary drama of uncertain future played in the ecological theater of the Strait of Gibraltar". **VI Congress of Plant Conservation Biology**. 15-18 October 2013. Murcia, Spain. Participation: **invited conference (plenary talk)**.
8. "*Narcissus* (Amaryllidaceae) as a model system for studying ecology and evolution of plant reproductive systems". **MONOCOTS V**. 7-13 July 2013. New York Botanical Garden, Bronx, New York, USA. Participation: **invited conference**.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. TED2021-131037B-I00, "COMbining past and present information as a tool of Plant BIODiversity conservation in a hotspot" (COMBIOVEG). Ministerio de Ciencia e Innovación. PI1: **J. Arroyo**, PI2: M. Arista. 01/12/2022-30/10/2025. 224.250 €.

2. PID2021-122715NB-I00, "Plant DIVERSification patterns and mechanisms mediated by CHROMosome transitions. Reproductive and environmental correlates" (DIVERSICHROM). Ministry for Science and Innovation. PI1: AM Escudero, PI2: **J. Arroyo**. 01/09/2022-31/08/2025. 234.740 €.
3. 897890 "Biodiversity drivers in Mediterranean-Type Ecosystems: Pollination and the evolution of mating phenotypes in yellow flaxes (*Linum* spp.) (FLAXMATE). European Commission, ERC-MSCA. PI1: V. Simón-Porcar (Researcher), PI2: **J. Arroyo** (advisor). 01/03/2021-28/12/2024. 203.263,2 €.
4. P18-RT-3651, "Evaluation of Andalusian plant biodiversity, from genes to ecosystems (BIOVEGAN). Andalusian Regional Gov, Ministry for Economy and Knowledge. PI1: **J. Arroyo**, PI2: M. Arista. 01/01/2020-31/03/2023. 108.292 €.
5. PGC2018-099608-B-I00 "Variation in reproductive systems in biogeographical and ecological gradients. Adaptation to increasing stressful environments". Ministry for Science, Innovation and Universities. PI1: **J. Arroyo**, PI2: AM Escudero. 01/01/2019-30/09/2022. 248.050 €.
6. US-1265280, "Biogeography, evolution, ecology and conservation of Andalusian flora (EVOFLORAND)". Andalusian Regional Gov, Ministry for Economy and Knowledge. PI: **J. Arroyo**, 01/02/2020-31/01/2022. 79.912 €.
7. CGL2013-45037-P "Conflict and separation of sexes: effects of herkogamy on the reproductive systems of hermaphroditic plants (CONFLISEX)". Ministry of Economy and Competitiveness. PI: **J. Arroyo**. 01/01/2014-31/12/2017. 302.500 €.
8. 296/2011 "Disentangling the history and evolution of the main Iberian plant biodiversity hotspot. A multiscale approach in Sierra Nevada National Park" Ministry of Environment, National Parks Authority. PI: **J. Arroyo**. 29/11/2011-28/11/2015. 161.805 €.
9. P09-RNM-5280 "Past, present and future of pre-Mediterranean plants, from success of macchia to demise of relics in a global change scenario". Andalusian Regional Gov, Ministry for Innovation, Science and Companies. PI: **J. Arroyo**. 03/02/2010-02/02/2014. 202.757 €.
10. CGL2009-12565, "Macro and microevolution of heterostyly and related style polymorphisms". Ministry for Science and Innovation. PI: **J. Arroyo**. 01/01/2010-31/12/2013. 168.795 €.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any.

1. Contract "Ecosystem evaluation of Hozgarganta river basin in Natural Park 'Los Alcornocales'-botanical part". Consejería de Medio Ambiente (Junta de Andalucía). PI: **J. Arroyo**. 1996-1998
2. Contracts 2000/00000631 and 2002/00001269 "Studies on biology and population genetic structure of trees and shrubs, in the Project of Compensatory Measures of highway A-381 Jerez-Los Barrios". Parts 1 & 2. 1999-2000 & 2002-2005. Company GIASA. PI: **J. Arroyo**.
3. Contract 2002/00000494 "Design of afforestation and restorations of tree and shrub species of ecological interest in the natural Park 'Los Alcornocales' "Diseño de repoblaciones y restauraciones de especies de árboles y arbustos de interés ecológico en el P.N. los Alcornocales" Company TRAGSA. PI: **J. Arroyo**. 2002-2002.
4. Transfer special Project OPN – Complementary Action CGL2008-02442-E "Darwin 2009 in Sevilla (Conferences and public exhibition for celebration of Darwin bicentennial)" Ministry for Science and Innovation. PI: **J. Arroyo**. 2008-2009.
5. International Cooperation projects (A/6962/06, A/016832/08) "Variations in plant-pollinator interactions. Effects of fragmentation and insularity in the Caribbean. Parts 1 & 2". AEI. PI: **J. Arroyo**. 2007-2008 and 2008-2009.
6. International Cooperation Projects AM50-04 "Methodological basis for a red list of rare and threatened species in Talasemane National park (N Morocco) and "Conservation of threatened plant species and communities in Morocco". Presidency Regional Ministry. PI: **J. Arroyo**. 2005-2006 and 2007-2008.

Part A. PERSONAL INFORMATION

First name	Antonio Marcial		
Family name	Escudero Lirio		
Gender	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number	28635311N	06/07/1982	
e-mail	aescudero2@us.es	URL Web https://bit.ly/	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-2541-5427		

Current position

Position	Profesor Titular		
Initial date	29/11/2019		
Institution	Universtiy of Seville		
Department/Center	Plant Biology and Ecology	Faculty of Biology	
Country	Spain	Teleph. number	665911979
Key words	Botany, Evolution, Biodiversity, Genomics, Chromosome		

Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2018-2019	Profesor Contratado Doctor / Uni. Seville/ Spain
2017-2018	Profesor Ayudante Doctor Int. / Uni. Seville/ Spain
4 weeks from Aug. 25th 2017	Parental leave
2015-2017	Juan de la Cierva / Uni. Seville/ Spain
2014-2015	Marie Curie IOF / EBD-CSIC / Spain
2012-2014	Marie Curie IOF / The Field Museum / USA
2010-2012	MEC-Fulbright / The Morton Arboretum / USA
2006-2010	FPU / Uni. Pablo de Olavide / Spain

Education

PhD, Licensed, Graduate	University/Country	Year
PhD	Uni. Pablo de Olavide / Spain	2009
Licenciatura Ciencias Ambientales	Uni. Pablo de Olavide / Spain	2005

RELEVANT MERITS**Publications**

Selected 10-top publications in the last 5 years:

1. Tribble C., Márquez-Corro J.I., May M., Hipp A.L., **Escudero M.** & Zenil-Ferguson R. 2024 online. Macroevolutionary inference of complex modes of chromosomal speciation in a cosmopolitan plant lineage. *New Phytol.* 245, 2350-2361.
2. Márquez-Corro J.I., Martín-Bravo S., Blanco-Pastor J.L., Luceño M. & **Escudero M.** 2024. The holocentric chromosome microevolution: from phylogeographic patterns to genomic as- sociations with environmental gradients. *Mol. Ecol.* 33, e17156.
3. Cornet C., Mora P., Augustijne H., Nguye P., **Escudero M.** & Lucek K. 2024. Holocentric repeat landscapes: from microevolutionary patterns to macroevolutionary associations with karyotype evolution. *Mol. Ecol.* 33, e17100.

4. **Escudero M.**, Marques A., Lucek K. & Hipp A.L. 2024. Genomic hotspots of chromosome rearrangements explain conserved syntenry despite high rates of chromosome evolution in a holocentric lineage. *Mol. Ecol.* 33, e17086.
5. Zuntini A.R., Carruthers T., Maurin O., ... Baker W.J. (position 104/279 authors). 2024. Phylogenomics and the rise of the angiosperms. *Nature* 629, 843-850.
6. Elliott T., Spalink D., Larridon I., ... Muasya M. (position 5/22 authors) 2024. Global analysis of Poales diversification – parallel evolution in space and time into open and closed habitats. *New Phytol.* 242, 727-743.
7. Simón-Porcar V., **Escudero M.**, Santos Gally R., Sauquet H., Schönenberger J., Johnson S. & Arroyo J. 2024. Convergent evolutionary patterns of heterostyly across angiosperms support the pollination-precision hypothesis. *Nature Comm.* 15, 1237.
8. Shafir A., Halabi K., **Escudero M.** & Mayrose I. 2023. A non-homogenous model of chromosome-number evolution to reveal shifts in the transition patterns across the phylogeny. *New Phytol.* 238, 1733-1744.
9. Carta A. & **Escudero M.** 2023. Karyotypic diversity: a neglected trait to explain angiosperm diversification? *Evolution* 77, 1158–1164.
10. Lucek K, Augustijnen H. & **Escudero M.** 2022. A holocentric twist to chromosomal speciation? *Trends Ecol. Evol.* 37, 655-662.

Research projects

Ref. BBVA Leonardo 2023. Deciphering genomic signatures of adaptive speciation in islands. BBVA Becas Leonardo 2023. Date: 9-2023 a 3-2025. Principal investigator: **Dr. Marcial Escudero** (Univ. Sevilla). Participation: **Principal Investigator**. 40,000 Eur.

Ref. PID2021-122715NB-I00. Patterns and mechanisms of plant diversification driven by chromosome shifts. Reproductive and environmental correlates (DiversiChrom). Convocatoria 2021 de proyectos de I+D de generación de conocimiento del programa estatal de generación de conocimiento y fortalecimiento científico y tecnológico del sistema de I+D+i. Date: 2022-2025. Principal investigators: **Dr. Marcial Escudero** and Dr. J. Arroyo (Universidad de Sevilla). Participation: **Principal investigator**. 194,527 Eur + four year PhD student.

Ref. PGC2018-099608-B-I00. Variación en sistemas reproductivos en gradientes biogeográficos y ecológicos. Adaptación a ambientes progresivamente más estresantes. Convocatoria 2018 de proyectos de I+D de generación de conocimiento del programa estatal de generación de conocimiento y fortalecimiento científico y tecnológico del sistema de I+D+i. Date: 2019-2021. Principal investigators: Dr. J. Arroyo (Universidad de Sevilla) and **Dr. Marcial Escudero**. Participation: **Principal investigator**. 248.050 Eur + four year PhD student.

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Violeta Irene		
Family name	Simón Porcar		
Gender	Female	Birth date (dd/mm/yyyy)	16/09/1984
ID number	29128796D	URL Web:	
e-mail	violetasp@us.es	scholar.google.es/citations?pli=1&user=AxBGfyQAAAAJ	
Open Researcher and Contributor ID (ORCID) (*)			0000-0003-4024-2824

A.1. Current position

Position	Interim Profesora Permanente Laboral		
Initial date	29/12/2024		
Institution	University of Sevilla		
Department/Center	Dept. Plant Biology and Ecology		
Country	Spain	Teleph. number	607442803
Key words	Floral biology, Mating systems, Evolutionary Ecology		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2021-2024	MSCA-IF postdoctoral researcher / University of Sevilla - University of Kwa-Zulu Natal / Spain-South Africa / End of project
2019-2021	Juan de la Cierva-Incorporación postdoctoral researcher / University of Sevilla / Spain / Starting MSCA project
2018-2019	Professional break for family reasons
2016-2017	Postdoctoral researcher hired in research project / University of Sevilla / Spain / End of project / Inc. four months maternity leave
2014-2016	MSCA-COFUND postdoctoral researcher / University of Stirling United Kingdom / End of project / Inc. six months maternity leave
2013-2014	Postdoctoral researcher hired in research project / University of Sevilla / Spain / Starting MSCA-COFUND project

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Molecular Biology	University of Sevilla/Spain	2013
Msc Research in Agricultural Sciences and Natural Habitats.	University of Zaragoza/Spain	2009
Msc Sustainable Crop Protection	University of Zaragoza/Spain	2008
BSc in Biology	University of Alcalá/Spain	2007

Part B. CV SUMMARY

I am an interim lecturer (Profesora Permanente Laboral) of Botany at the Department of Plant Biology and Ecology at the University of Seville (US). I am interested in the evolution of plant reproductive systems, from asexual reproduction to sophisticated floral polymorphisms, including the role of pollinators. To unravel the determining factors and evolutionary consequences of reproductive systems, I explore their patterns of variation at macro and micro evolutionary levels. In microevolutionary studies, my study systems have been the genera *Narcissus*, *Mimulus* and *Linum*. My goal is to help understand how reproductive traits and pollinators promote biodiversity in Mediterranean ecosystems. I use multidisciplinary approaches including field data, laboratory work, experiments and comparative analyses.

I graduated in Biological Sciences from the University of Alcalá in 2007 and obtained two MSc degrees related to Environmental and Agricultural Sciences from the University of Zaragoza in 2008 and 2009. In 2008, I obtained two different FPI predoctoral scholarships and I joined the EVOCA research group at the University of Seville to develop my PhD. During my degree and my predoctoral period, I enjoyed research stays at the University of León (2006, two months, León, Nicaragua), the Australian National University (2010, two months, Canberra, Australia), Centro Experimental Aula Dei-CSIC (2011, four months, Zaragoza, Spain) and the University of St Andrews (2012, three months, St Andrews, United Kingdom). With my thesis "Evolutionary Ecology of Styler Polymorphism in *Narcissus papyraceus* Ker-Gawl. (Amaryllidaceae)", I obtained my PhD in Evolutionary Ecology in 2013 with the International and *Cum Laude* mentions.

During my postdoctoral period, I participated in eight research projects funded in competitive calls from various Spanish Government Agencies, with two postdoctoral contracts associated with them. In addition, I obtained three postdoctoral contracts funded in competitive calls, including a MSCA-COFUND Plant Fellows contract at the University of Stirling (UK; 2014-2016), a "Juan de la Cierva – Incorporación" contract at the University of Seville (2019-2021), and a MSCA-IF-GF contract at the Universities of Seville and Kwa-Zulu Natal (South Africa; 2021-2024). For two years (2018-2019), I stopped my research career for family reasons.

Adding my predoctoral and postdoctoral periods, I have spent a total of 41 months in foreign institutions. My collaboration network includes 20 scientists from 11 institutions in Spain, the UK, the USA, Sweden and South Africa.

I have published 24 scientific articles in international peer-reviewed journals, 16 of them as first author and/or corresponding author, and 13 of them in Q1 journals, including Nature Communications, New Phytologist, Evolution, Journal of Ecology or Annals of Botany. My articles have been cited 394 times (Google Scholar; h index=11). I have co-authored two book chapters. My review activity includes forty-seven scientific articles, and I am part of the PCIEvolBiol recommenders panel.

I have presented the results of my research as first author in 23 scientific conferences or meetings, 17 of them international and 14 in the form of oral presentations, including an invited talk at the V SEBOT Symposium (Granada 2024).

I have published an outreach book (Guía de Flora y Fauna del Parque Geológico de Aliaga) and seven popular articles, including magazines such as "Ecosistemas" or "Veld & Flora", and online platforms such as "The conversation". I have also organized or participated in 23 outreach actions, including press releases, a documentary, round tables, activities in schools and high schools during the International Day of Women and Girls in Science, an invited talk at the Bioblitz 2024, and a family activity during "The European Night of Researchers".

I have participated in the organization of three congresses or symposia, two of them as Chair of organization: the XIV annual Ecoflor meeting (Seville 2017) and the Symposium "Floral polymorphisms as a research target in natural selection", during the XX International Congress of Botany (Madrid 2024).

I have participated in three evaluation committees: two Doctoral Thesis tribunals (University of Granada, 2023; University of Seville, 2024) and a committee for the evaluation of the extraordinary doctoral awards (University of Seville, 2023).

Part C. RELEVANT MERITS

C.1. Publications (corresponding author*)

1. **Simón-Porcar V***, Escudero M, Santos-Gally R, Sauquet H, Schönenberger J, Johnson SD, Arroyo J. 2024. Convergent evolutionary patterns of heterostyly across angiosperms support the pollination-precision hypothesis. **Nature Communications** **15**, 1237. doi.org/10.1038/s41467-024-45118-0.
2. Vanrell MA, Novaes LR, Afonso A, Arroyo J, **Simón-Porcar V***. 2024. Ecological correlates of population genetics in *Linum suffruticosum*, an heterostylous polyploid and taxonomic complex endemic to the western Mediterranean Basin. **AoB Plants**, plae027.
3. **Simón-Porcar V***, Muñoz-Pajares AJ, Arroyo J, Johnson SD. 2024. FlowerMate: multidimensional reciprocity and inaccuracy indices for style-polymorphic plant populations. **Applications in Plant Sciences** **12**, e11618. doi.org/10.1002/aps3.11618.
4. Novaes LR, Cornelissen T, Arroyo J, **Simón-Porcar V**. 2024. Meta-analyses of reproductive changes in angiosperm populations in response to elevation reveal a lack of global patterns. **Annals of Botany** **22**, mcae062. doi.org/10.1093/aob/mcae062.
5. **Simón-Porcar VI***, Muñoz-Pajares AJ, de Castro A, Arroyo J. 2022. Direct evidence supporting Darwin's hypothesis of cross-pollination promoted by sex organ reciprocity. **New Phytologist** **235**, 2099-110. doi.org/10.1111/nph.18266.
6. **Simón-Porcar VI***, Silva JL, Vallejo-Marín M. 2021. Rapid local adaptation in both sexual and asexual invasive populations of monkeyflowers (*Mimulus* spp.). **Annals of Botany** **127**, 655-668. doi.org/10.1093/aob/mcab004.
7. **Simón-Porcar VI***, Silva JL, Meeus S, Higgins JD, Vallejo-Marín M. 2017. Recent autopolyploidization in a naturalized population of *Mimulus guttatus* (Phrymaceae). **Botanical Journal of the Linnean Society** **185**, 189-207. doi.org/10.1093/botlinnean/box052.
8. **Simón-Porcar VI***, de Castro A, Herrero M, Arroyo J. 2015. Ovarian self-incompatibility in *Narcissus papyraceus* (Amaryllidaceae) is the result of a pre-zygotic response. **Botanical Journal of the Linnean Society** **177**, 629-643.
9. **Simón-Porcar VI***, Meagher TR, Arroyo J. 2015 Disassortative mating prevails in style-dimorphic *Narcissus papyraceus* despite low reciprocity and compatibility of morphs. **Evolution** **69**, 2276-2288. doi.org/10.1111/evo.12731, doi.org/10.1111/evo.12796
10. **Simón-Porcar VI***, Santos-Gally R, Arroyo J. 2014 Long-tongued insects promote disassortative pollen transfer in style-dimorphic *Narcissus papyraceus* (Amaryllidaceae). **Journal of Ecology** **102**(1):116-25. doi.org/10.1111/1365-2745.12179

C.2. Congress

1. "On how reproductive traits and pollinators promote plant biodiversity. Examples at various scales." **V Symposium SEBOT**. 30/11/2024. Granada, Spain. Participation: **invited conference**.
2. "Using geometric morphometrics for the study of stilar polymorphisms: insights into the evolution and function of mating phenotypes in yellow flaxes". **XX International Botany Congress**. 27/07/2024. Madrid, Spain. Participation: **oral presentation**.
3. "New tools for the study of sex reciprocity and pollen transfer in stilar-polymorphic plants, and their application in Linum" **XXI ECOFLOR conference**. 02/02/2024. Coimbra, Portugal. Participation: **oral presentation**.
4. "Convergent evolution of heterostyly and the role of pollination systems". **IX SESBE conference**. 18/01/2024. Málaga, Spain. Participation: **oral presentation**.
5. "Generalist pollinators underlie the function and evolution of heterostyly: studies across all angiosperm genera and in *Linum* species". **XII International Symposium on Pollination**. 20/10/2023. Cape Town, South Africa. Participation: **oral presentation** awarded with "Best session talk award".
6. Direct evidence supporting Darwin's hypothesis of cross-pollination promoted by sex organ reciprocity". **XV AEET congress**. 22/10/2021. Plasencia, Spain. Participation: **oral presentation**.

7. **XIV ECOFLOR conference.** 29-31/01/2017. Seville, Spain. Participation: **chair of the organizing committee.**
8. Disassortative mating in plants: paternity analysis of floral morphs within experimental populations. **4º Iberian Congress of Ecology.** 19/06/2015. Coimbra, Portugal. Participation: **oral presentation.**
9. "Mimulus in Scotland". **Mimulus Meeting 2014.** 19/06/2014. Durham, USA. Participation: **oral presentation.**
10. "Disassortative mating prevails in non-reciprocal floral morphs of *Narcissus papyraceus*" **X ECOFLOR conference.** 01/02/2013. Sevilla, Spain. Participation: **oral presentation.**

C.3. Research projects

1. PID2021-122715NB-I00 "Patterns and mechanisms of plant diversification mediated by chromosomal transitions. Reproductive and environmental correlates" Ministry for Science, Innovation and Universities. PI1: AM Escudero, PI2: J. Arroyo. 194.527,0 €. **Member of the Research team. Fieldwork, lab work and analyses for population genetics and phylogenetics in *Linum*. PhD supervision.**
2. H2020-897890 "Biodiversity drivers in Mediterranean-Type Ecosystems: Pollination and the evolution of mating phenotypes in yellow flaxes (*Linum* spp.). European Commission, ERC-MSCA. **PI1: V. Simón-Porcar (Researcher)**, PI2: J. Arroyo (advisor). 01/03/2021-28/12/2024. 203.263,2 €. **Wrote and executed the Project.**
3. P18-RT-3651, "Evaluation of Andalusian plant biodiversity, from genes to ecosystems (BIOVEGAN). Andalusian Regional Gov, Ministry for Economy and Knowledge. PI1: J. Arroyo, PI2: M. Arista. 01/01/2020-31/03/2023. 108.292 €. **Member of the working team. Field work and floristic database building.**
4. PGC2018-099608-B-I00 "Variation in reproductive systems in biogeographical and ecological gradients. Adaptation to increasing stressful environments". Ministry for Science, Innovation and Universities. PI1: J. Arroyo, PI2: AM Escudero. 01/01/2019-30/09/2022. 248.050 €. **Member of the working team. Fieldwork and analyses of breeding systems and phylogenetics in *Narcissus*. PhD supervision.**
5. US-1265280, "Biogeography, evolution, ecology and conservation of Andalusian flora (EVOFLORAND)". Andalusian Regional Gov, Ministry for Economy and Knowledge. PI: J. Arroyo, 01/02/2020-31/01/2022. 79.912 €. **Member of the working team. Field work and floristic database building.**
6. MSCA-COFUND "Phenotypic variation and local adaptation in clonal vs. sexual populations: a test using introduced populations of monkey-flowers". European Commission. **PI1: V. Simón-Porcar (Researcher)**, PI2: M. Vallejo-Marín (Advisor). 01/03/2014-29/02/2016. 22.620 €. **Wrote and executed the Project.**
7. CGL2013-45037-P "Conflict and separation of sexes: effects of herkogamy on the reproductive systems of hermaphroditic plants (CONFLISEX)". Ministry of Economy and Competitiveness. PI: J. Arroyo. 01/01/2014-31/12/2017. 302.500 €. **Member of the working team. Fieldwork and genetic and analyses of breeding systems in *Narcissus*. PhD supervision.**
8. 296/2011 "Disentangling the history and evolution of the main Iberian plant biodiversity hotspot. A multiscale approach in Sierra Nevada National Park" Ministry of Environment, National Parks Authority. PI: J. Arroyo. 29/11/2011-28/11/2015. 161.805 €. **Member of the working team, hired as a postdoctoral researcher. Leader of one article on phylogenetic diversity in Sierra Nevada.**
9. CGL2009-12565, "Macro and microevolution of heterostyly and related style polymorphisms". Ministry for Science and Innovation. PI: J Arroyo. 01/01/2010-31/12/2013. 168.795 €. **FPI fellow.**
10. "Flora and Fauna of the Aliaga Geological Park". Teruel Studies Institute. **PI1: V. Simón-Porcar (Researcher)**, PI2: C. Bartolomé (Advisor). 01/09/2008- 01/09/2009. 1.600 €. **Wrote and executed the Project.**

C.4. Contracts, technological or transfer merits

NA