

CURRICULUM VITAE

Part A. PERSONAL INFORMATION		CV date	08/03/2024
First name	Núria		
Family name	Galiana Ibáñez		
Gender (*)	Female	Birth date	17/11/1988
Social Security, Passport, ID number	SS: 081214716720 Passport: PAH766384 DNI: 47820942-D		
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Open Researcher and Contributor ID (ORCID) (*)	0000-0001-7720-0615		

(*) *Mandatory*

A.1. Current position

Position	Marie Curie Postdoctoral Fellow		
Initial date	01/03/2022		
Institution	Consejo Superior de Investigaciones Científicas		
Department/Center	Biogeography and Global Change	National Museum of Natural Sciences	
Country	Spain	Teleph. number	
Key words	Ecological networks, species interactions, biodiversity, species distribution, biogeography, community ecology, theoretical ecology, spatial scale, network biogeography.		

A.2. Previous positions (research activity interruptions)

Period	Position/Institution/Country/Interruption cause
September 2023 – January 2024	Maternity leave
November 2020 – December 2021	ERC Postdoctoral Fellow / Institut de Ciència i Tecnologia Ambientals (ICTA), Universitat Autònoma de Barcelona / Spain / Fixed-term contract
December 2018 – October 2020	ERC Postdoctoral Fellow / Centre for Biodiversity Theory and Modelling / France / Fixed-term contract
March 2015 – October 2018	PhD candidate / Theoretical and Experimental Ecology Station (SETE), CNRS and Université Toulouse III - Paul Sabatier / France / End of scholarship
January 2015 – March 2015	Research assistant / Theoretical and Experimental Ecology Station (SETE), CNRS / France / Start of PhD
June 2014 – October 2014	Research intern / University of Rimouski / Quebec, Canada / 5 months scientific internship
September 2012 – May 2014	Research Assistant / Centre for Ecological Research and Forestry Applications (CREAF) / Spain / Fixed-term contract
March 2011 – July 2011	Field assistant / National Institute of Biodiversity of Costa Rica (INBio) / Costa Rica / 5 months scientific internship
September 2010 – March 2011	Research Assistant / Biology and Ecology Department, Universitat Autònoma de Barcelona / Spain / Fixed-term contract

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Ecology	Université Toulouse III - Paul Sabatier and Theoretical and Experimental Ecology Station, (CNRS) / France	2018
MSc. in Biodiversity and Terrestrial Ecology	Center for Ecological Research and Forestry Applications (CREAF), Universitat Autònoma de Barcelona / Spain	2012
BSc. in Environmental Science	Universitat Autònoma de Barcelona / Spain	2011



Part B. CV SUMMARY

My research focuses on the integration of spatial and biogeographical processes into species interaction network research to better understand large-scale biodiversity patterns. The main objective of my research is twofold: to understand how ecological communities are organised across the globe and to disentangle the role of biotic interactions in determining large-scale biodiversity patterns. In particular, my work has provided paramount knowledge about the mechanisms behind the geographical variation of complex ecological networks, the importance of the spatial scale for understanding network structure, or the influence of biotic interactions in determining species distributions. These cutting-edge findings have contributed to bridge the traditional gap between biogeographical studies and network ecology, setting the cornerstone of the emerging field of Network Biogeography.

My research approach merges the development of computational and mathematical theoretical models for ecological systems with the analysis of large empirical datasets using sophisticated analytical tools. This theoretical-empirical approach is key to be able to develop general knowledge, infer causality from the patterns observed, and generate predictions. Through my training and years of research, I acquired a multidisciplinary background encompassing aspects of complex networks and biotic interactions, ecological theory and community dynamics, and more recently, species distribution modelling and Geographic Information Systems. This integrated set of scientific-technical skills allow me to tackle challenging problems at the interface between ecology and biogeography with a novel perspective.

This strong interdisciplinarity (theoretical and empirical ecology, computer science, mathematics and biogeography) is reliant on my extensive network of scientific collaborators. I have established several collaborations with leading research teams from many institutions around the world such as Sherbrook University, Quebec (theoretical and analytical aspects of ecological networks), the Alpine Ecology Laboratory at the Grenoble Alpes University, France (biogeographical terrestrial networks), Swansea University, United Kingdom (computational ecology), and the Theoretical and Experimental Ecology Station of the CNRS, France (theoretical ecology and community dynamics). In collaboration with scientists at these (and other) institutions I have led several research projects that have resulted in cutting-edge publications published in high-impact scientific journals (as evidenced in Part C.1).

My research has resulted in the publication of over 20 scientific articles in peer-reviewed journals and book chapters. These publications have collectively attracted 686 citations (Google Scholar, 8th March 2024), with i10- and h- indices of 14 and 12 respectively. I have been part of different European Research Council projects, and I have been awarded a Marie Skłodowska-Curie Individual Fellowship to develop my own research. I have also received the L'Oréal-Unesco "For Women in Science" award (see Part C.3).

I have contributed to the development of young researchers by supervising a Master student during my first postdoctoral position, which resulted in a high-impact publication, and I am currently co-supervising 3 PhD students. I am a co-founder of the INTP (Institut Natura e Teoria en Pirinèus), an independent interdisciplinary research institute founded in 2019 devoted to extend fundamental research to a greater variety of profiles and develop rigorous concepts and tools for science at the interfaces (<https://intp.science>). Within the INTP we organise a yearly autumn school on Theoretical Ecology in which I deliver the course on complex network theory for ecology. I have also participated in the European Researchers' night at the Nacional Museum of Natural Sciences in Madrid and participated in multiple dissemination activities for school children in France.

I am Subject Editor for Ecography and I am part of the editorial board of a special issue in Ecography on Predictive Biogeography. I regularly serve as a reviewer for high-impact international scientific journals such as Nature Ecology and Evolution, American Naturalist, Ecography, Global Ecology and Biogeography, Proceedings of the Royal Society B, Oikos, Oecology and Frontiers in Ecology and Evolution. I have acted as reviewer of highly competitive research proposals for the National Science Foundation.



Part C. RELEVANT MERITS

C.1. Publications (10 most relevant).

AC: corresponding author. (n° x / n° y): position / total authors.

1. **Scientific paper.** Galiana, N (AC), Arnoldi, JF, Mestre, F, Rozenfeld, A and Araújo, MB (2024) Power laws in species' biotic interaction networks can be inferred from co-occurrence data. *Nature Ecology and Evolution*, 8 (2), 209-217, [doi:10.1038/s41559-023-02254-y](https://doi.org/10.1038/s41559-023-02254-y) (1/5).
2. **Scientific paper.** Zelnik, Y*, Galiana, N*, Barbier, M, Loreau, M, Galbraith, ED and Arnoldi, JF (2024) How collectively integrated are ecological communities? *Ecology Letters*, 27, e14358. [doi:10.1111/ele.14358](https://doi.org/10.1111/ele.14358) (*joint first authorship; 2*/6)
3. **Scientific paper.** Galiana, N (AC), Lurgi, M, Montoya, JM, Araújo, MB, & Galbraith, ED (2023). Climate or diet? The importance of biotic interactions in determining species range size. *Global Ecology and Biogeography*, 32, 1178–1188. [doi:10.1111/geb.13686](https://doi.org/10.1111/geb.13686) (1/5).
4. **Scientific paper.** Galiana, N (AC), Lurgi, M, Bastazini, VAG. *et al.* Ecological network complexity scales with area. *Nature Ecology and Evolution* 6, 307–314 (2022). [doi:10.1038/s41559-021-01644-4](https://doi.org/10.1038/s41559-021-01644-4) (1/29).
5. **Scientific paper.** Galiana, N (AC), Barros, C, Braga, J, Ficetola, GF, Maiorano, L, Thuiller, W, Montoya, JM and Lurgi, M (2021), The spatial scaling of food web structure across European biogeographical regions. *Ecography*, 44: 653-664. [doi:10.1111/ecog.05229](https://doi.org/10.1111/ecog.05229) (1/8).
6. **Scientific paper.** Galiana, N (AC), Arnoldi, JF, Barbier, M, Acloque, A, de Mazancourt, C and Loreau, M (2021), Can biomass distribution across trophic levels predict trophic cascades?. *Ecology Letters*, 24: 464-476. [doi:10.1111/ele.13658](https://doi.org/10.1111/ele.13658) (1/6).
7. **Scientific paper.** Albouy, C (AC), Archambault, P, Appeltans, W, ... Galiana, N, *et al.*, Gravel, D. The marine fish food web is globally connected. *Nature Ecology and Evolution* 3, 1153–1161 (2019). [doi:10.1038/s41559-019-0950-y](https://doi.org/10.1038/s41559-019-0950-y) (9/15).
8. **Scientific paper.** Galiana, N, Hawkins, BA and Montoya, JM (AC) (2019), The geographical variation of network structure is scale dependent: understanding the biotic specialization of host–parasitoid networks. *Ecography*, 42: 1175-1187. [doi:10.1111/ecog.03684](https://doi.org/10.1111/ecog.03684) (1/3)
9. **Scientific paper.** Galiana, N, Lurgi, M, Claramunt-López, B *et al.*, Montoya, JM (AC) The spatial scaling of species interaction networks. *Nature Ecology and Evolution* 2, 782–790 (2018). [doi:10.1038/s41559-018-0517-3](https://doi.org/10.1038/s41559-018-0517-3) (1/8)
10. **Scientific paper.** Galiana, N, Lurgi, M, Montoya, JM and López, BC (AC) (2014), Invasions cause biodiversity loss and community simplification in vertebrate food webs. *Oikos*, 123: 721-728. [doi:10.1111/j.1600-0706.2013.00859.x](https://doi.org/10.1111/j.1600-0706.2013.00859.x) (1/4)

C.2. Congress (10 most relevant)

1. Galiana, N, **International Biogeography Society 11th Biennial Conference**, Prague, January 2024. Symposium 'Network Biogeography: The Present and Future of Terrestrial Food Webs.' Oral presentation: Climate or diet? The importance of biotic interactions in determining species range size. **Symposium organizer and speaker.**
2. Galiana, N, **SFE2-GfÖ-EEF joint meeting: International conference on Ecological Sciences**, Metz (France), November 2022. Oral presentation: The simplification of ecological communities: effects of habitat loss on network structure. **Symposium invited speaker.**
3. Galiana, N, **International Biogeography Society Funk Lecture Series on Biogeography**, October 2022. Oral presentation: Macroecological Networks: integrating biogeography, spatial processes and species interaction networks. **Invited speaker.**



4. Galiana, N, **Swiss Federal Institute of Aquatic Science and Technology' Seminar Series**. Zurich, April 2022. Oral presentation: Macroecological Networks: integrating biogeography, spatial processes and species interaction networks. **Invited speaker**.
5. Galiana, N, Lurgi, M, Bastazini, VAG *et al.* **ECONET 2021: V Symposium on ecological networks**. Mallorca, Spain, November 2021. **Oral presentation**: The spatial scaling of ecological networks across the globe.
6. Galiana, N, Arnoldi, JF, Barbier, M, Acloque, A, de Mazancourt, C and Loreau, M **Ecological Society of America Annual meeting**, Virtual conference, August 2020. **Oral presentation**: Can biomass distributions across trophic levels predict trophic cascades?
7. Galiana, N, Hawkins, BA and Montoya, JM **British Ecological Society Annual meeting joint with GFÖ, NecoV and EEF: Ecology across borders**, Ghent, December 2017. **Poster presentation**: The geographical variability of network structure is scale dependent.
8. Galiana, N, Hawkins, BA and Montoya, JM **SFE French Ecological Society International meeting**, Marseille, October 2016. **Oral presentation**: The geographical variability of network structure is scale dependent.
9. Galiana, N, Lurgi, M, Claramunt-López, B *et al.* **British Ecological Society Annual meeting**, Edinburgh, December 2015. **Oral presentation**: The spatial scaling of food web structure.
10. Galiana, N and Montoya, JM, **11th INTECOL Congress, Ecology: Into the next 100 years jointly with BES Annual Meeting**, London, August 2013. **Oral presentation**: Integrating Biogeography and food web research.

C.3. Research projects

1. **L'Oréal-Unesco "For Women in Science" 2022**. Global projection of ecological networks in a changing climate (15.000€). **Principal investigator**.
2. **Marie Skłodowska-Curie Individual Fellowship**. BIOFOODWEB (No 101025471). Integrating biogeography and food web ecology to understand the influence of species diet breadth on their range size (160.932€). Starting date: 01/03/2022; end date: 01/07/2024 (including 4 months of extension due to maternity leave). **Principal investigator**.
3. **ERC Consolidator Grant BIGSEA**. PI: Dr. Eric Galbraith. Funding: European Research Council under the European Union's Horizon 2020 research and innovation programme (682602). Starting date: 01/11/2020; end date: 31/12/2021. **Postdoctoral fellow** in charge of modelling ecological communities at large spatial scales.
4. **ERC Advanced Grant BIOSTASES**. PI: Dr. Michel Loreau. Funding: European Research Council under the European Union's Horizon 2020 research and innovation program (666971). Starting date: 01/12/2018; end date: 31/10/2020. **Postdoctoral Fellow** in charge of linking theory and data.
5. **French Laboratory of Excellence Project 'TULIP'** (ANR-10-LABX-41; ANR-11-IDEX-002-02). Starting date: 01/01/2015; end date: 01/03/2015. PI: Dr. José M. Montoya. Development of bioinformatic techniques for network analyses, data management and statistical tools.
6. **Spanish woodlands and global change: threats and opportunities (MONTES)**. CONSOLIDER project. CSD2008-00040. MICINN. PI: Dr. Javier Retana (CREAF). Starting date: 01/09/2012; end date: 30/05/2014. Research assistant for data collection and construction of the vertebrate food web of the Pyrenees.

C.4. Internationalization and mobility

1. Postdoctoral position in Theoretical Ecology. Center for Biodiversity Theory and Modeling (CNRS), France. PI: Michel Loreau. December 2018 – October 2020.
2. PhD in Ecology. Université Toulouse III - Paul Sabatier, France. March 2015 – October 2018.
3. Scientific internship. Theoretical Ecosystem Ecology Lab led by Dominique Gravel. Quebec, Canada. June – October 2014.
4. Bachelor degree dissertation. National Institute of Biodiversity of Costa Rica (INBio), San José, Costa Rica. Thesis: La participación social como método de conservación (Social participation as a method for conservation). February – July 2011.

C.5. Grants and fellowships

1. Research Awards L'Oréal-Unesco "For Women in Science" 2022 (15.000 €).
2. Marie Skłodowska-Curie Individual Fellowship. BIOFOODWEB (No 101025471). Integrating biogeography and food web ecology to understand the influence of species diet breadth on their range size (160.932 €).
3. Juan de la Cierva Postdoctoral Fellowship (DECLINED).