# CURRICULUM VITAE

David García Callejas January 2025

### **OVERVIEW**

## PERSONAL INFORMATION

Dr. Jose David García Callejas 18 April 1984 DNI: 31729479J

## **RESEARCH INFORMATION**

ORCID ID: 0000-0001-6982-476X Researcher ID: C-3779-2017 Google Scholar GitHub Personal Website

18 SCI peer-reviewed papers, 411 citations, h-index = 11, i-index = 13 (Google Scholar) 248 citations, h-index = 8 (WoS/Scopus) > 50 co-authors from > 13 countries

## TEACHING INFORMATION

480 university teaching hours up to October 2024 + > 80 hours of teaching at other institutions.

Supervision of 3 M.Sc. students.

Teaching accreditations: *Profesor Ayudante Doctor* (Lecturer) since 2020, *Profesor Contratado Doctor* (Assistant Professor) since 2024 by ANECA. *Lector* (Lecturer) since 2024 by AQU.

### CURRENT APPOINTMENTS

Postdoctoral researcher, University of Graz and CEAB-CSIC	October 2024 to present
<b>PI of the project</b> <i>HOROS</i> "Biotic interactions and ecological predictability", funded by the Project information	October 2024 to October 2027 Austrian Science Fund

### GRANTS AND AWARDS

Special Award for Doctorate Studies Autonomous University of Barcelona.	2019
FPU Visiting researcher scholarship Science and Education Ministry, Spain.	2017
FPU Ph.D. scholarship programme Science and Education Ministry, Spain.	2014–2018
M.Sc. scholarship programme "Fundación Obra Social La Caixa", Spain.	2011–2012.
International scholarship programme "Fundación Bancaja", Spain.	2010

# ACADEMIC EDUCATION

Ph.D. in Terrestrial Ecology, Autonomous University of Barcelona	November 2018
<ul> <li>Thesis Title: Structure and dynamics of ecological networks with multiple i</li> <li>Advisors: Prof. Miguel B. Araújo, Dr. Roberto Molowny-Horas</li> </ul>	
• Qualification: <i>Magna Cum Laude</i> with International Doctorate Distinction Award for Doctoral Studies.	and UAB Special
• Associated stays: Integrative Ecology Lab, Univ. of Sherbrooke (Quebec supervised by Prof. Dominique Gravel	), Sept–Dec/2017,
• Thesis document and LaTeX template available at: https://github.com/garciacallejas/Thesis	
M.Sc. in Terrestrial Ecology, Autonomous University of Barcelona	September 2012
• Thesis Title: Projecting the distribution and abundance of Mediterranean climate change: a demographic approach	tree species under
<ul><li>Advisors: Prof. Javier Retana, Dr. Roberto Molowny-Horas</li><li>60 ECTS</li></ul>	
<b>B.Sc. in Environmental Sciences</b> , University of Alcala	July 2010
• 300 ECTS	
<b>B.Sc. in Computer Science</b> , University of Granada	September 2006

• 180 ECTS

### SUMMARY OF SCIENTIFIC CAREER

I am a researcher in ecology, grounded on the balance between theory and empirical observations, with a particular focus on understanding the structure and dynamics of ecological communities. I am deeply interested in the range of emergent properties that appear at the community scale and the sheer variability in ecological interactions found in nature. I firmly believe that in order to understand and predict ecological phenomena, we need to balance and create positive feedbacks between theory, numerical models and experiments, and empirical observations. Furthermore, community ecology being tightly linked to both population ecology and larger-scale processes, my research profile allows me to collaborate with ecologists from very different backgrounds.

Since October 2024 I am the single PI of the project *HOROS: Biotic interactions and ecological predictability*, funded by the Austrian Science Fund at the University of Graz. Previously I worked as a postdoctoral researcher at the University of Canterbury, New Zealand (Nov 2021 - June 2024) and at Doñana Biological Station and University of Cádiz, Spain (Jan 2019 - July 2021). In these positions I have led high-profile studies in leading multidisciplinary and ecological journals. In particular, my research contributed to understanding how interactions between species shape the ecological assemblages we observe in nature and their stability. I have contributed both theoretical developments and studies involving complex empirical data on different types of biotic interactions. Besides my published studies, I have contributed open-access software to the scientific community, and have adopted standards and practices for ensuring the reproducibility and open access of my research (e.g. all my first-author papers have open code and data available). I have presented my research at 11 international conferences and have given 6 invited talks in different institutions, as well as chaired one session in an international conference and co-organised two national and international conferences. I have participated actively in 9 international research projects and my network of direct collaborators includes >30 researchers from 10 countries.

In parallel to my research activities, I have extensive teaching experience at the university level, with a total of 480h of B.Sc. and M.Sc. courses taught since 2015. My teaching has focused on ecology, both theoretical and practical, and related courses, with a strong focus on quantitative training. For example, I designed and taught for 2 years a full course of advanced statistics at the M.Sc. of Biodiversity Conservation at University of Huelva. In addition to the university-level teaching, I have further taught different courses and workshops on data management, programming for academic research, and scientific reproducibility, for a total of >80h. I have supervised 3 M.Sc. students (two in 2021 and one ongoing), and will start 1-2 Ph.D. supervisions during 2025, contingent on funding.

Overall, in my profile I combine a strong quantitative foundation with a deep understanding of ecological processes across scales and levels of organisation. This allows me to both lead highprofile projects and to collaborate and teach in a wide range of general and specialised topics.

### **RESEARCH EXPERIENCE**

### SCIENTIFIC POSITIONS

**Postdoctoral researcher**, University of Canterbury and Landcare Research New Zealand November 2021 to June 2024

Postdoctoral researcher, University of Cadiz	February 2020 to September 2021
Postdoctoral researcher, EBD-CSIC	January 2019 to November 2019
Doctoral researcher, CREAF-UAB	September 2014 to November 2018
<b>Research technician</b> , Imperial College	January 2014 to August 2014
<b>Research technician</b> , University of Évora	March 2013 to January 2014
Research technician, CREAF	September 2012 to February 2013

## PUBLICATIONS IN INDEXED JOURNALS

- Martins, L., García-Callejas, D., Lai, H.R., Wootton, K., Tylianakis, J.M. 2024. The propagation of disturbances in ecological networks. *Trends in Ecology and Evolution*, 39:558-570. doi:10.1016/j.tree.2024.01.009
- [2] Allen-Perkins, A., Hurtado, M., García-Callejas, D., Godoy, O., Bartomeus, I. 2024. Individualbased plant-pollinator networks unveils pollen flow dynamics and plant reproductive success. *Oikos*, 2024:e10168. doi:10.1111/oik.10168
- [3] Fortuny-Fernández, N.M, García-Callejas, D., Damon, A., Martínez-Zurimendi, P., Labrín-Sotomayor, N.Y., Peña-Ramírez, Y. 2024. Factors driving tree community structure in traditional home gardens in the Mayan forest. Urban Forestry and Urban Greening, 99:128466 doi:j.ufug.2024.128466
- [4] Allen-Perkins, A., García-Callejas, D., Bartomeus, I., Godoy, O. 2023. Structural asymmetry in biotic interactions as a tool to understand and predict ecological persistence. *Ecology Letters*, 26:1647-1662. doi:10.1111/ele.14291
- [5] García-Callejas, D., Godoy, O., Buche, L., Hurtado, M., Lanuza, J.B., Allen-Perkins, A., Bartomeus, I. 2023. Non-random interactions within and across guilds shape the potential to coexist in multi-trophic ecological communities. *Ecology Letters*, 26:831-842. doi:10.1111/ele.14206
- [6] Paniw, M., García-Callejas, D., Lloret, F., Bassar, R.D., Travis, J., Godoy, O. 2023. Pathways to global-change effects on biodiversity: new opportunities for dynamically forecasting demography and species interactions. *Proceedings of the Royal Society B*, 290:20221494. doi:10.1098/rspb.2022.1494
- [7] Mestre, F., Gravel, D., García-Callejas, D., Pinto-Cruz, C., Matías, M.G., Araújo, M.B.
   2022. Disentangling environment food web relationships: a review with guidelines. *Basic and Applied Ecology*, 61:102-115. doi:10.1016/j.baae.2022.03.011
- [8] García-Callejas, D., Bartomeus, I., Godoy, O., 2021. The spatial configuration of biotic interactions shapes coexistence-area relationships in an annual plant community. *Nature Communications*, 12:6192. doi:10.1038/s41467-021-26487-2

- [9] Civantos-Gónzalez, I., Algarra, F. J., García-Callejas, D., Galeano, J., Godoy, O., Bartomeus, I. Fine scale prediction of ecological community composition using a two-step sequential machine learning ensemble. *Plos Computational Biology*, 17(12):e1008906. doi:10.1371/journal.pcbi.1008906
- [10] Taheri, S., García-Callejas, D., Araújo, M.B., 2021. Discriminating climate, land-cover and random effects on species range dynamics. *Global Change Biology*, 27:1306-1317. doi:10.1111/gcb.15483
- [11] García-Callejas, D., Godoy, O., Bartomeus, I. 2020. cxr: A toolbox for modelling species coexistence in R. Methods in Ecology and Evolution, 11:1221-1226. doi:10.1111/2041-210X.13443
   Associated R package: https://github.com/RadicalCommEcol/cxr
- [12] García-Callejas, D., De la Cruz Rot, M. 2020. Cómo crear paquetes de R. Ecosistemas, 29:1948. doi:10.7818/ECOS.1948
- [13] García-Callejas, D., Molowny-Horas, R., Araújo, M.B., Gravel, D. 2019. Spatial cascades in communities connected by dispersal and foraging. *Ecology*, 100:e02820. doi:10.1002/ecy.2820
- [14] García-Callejas, D., Torres, A. 2019. Restauración de interacciones ecológicas: medidas y consecuencias a escala de comunidad. *Ecosistemas*, 28:42-49. doi:10.7818/ECOS.1748
- [15] García-Callejas, D., Molowny-Horas, R., Araújo, M.B. 2018. The effect of multiple biotic interaction types on species persistence. *Ecology*, 99:2327–2337. doi:10.1002/ecy.2465
- [16] García-Callejas, D., Molowny-Horas, R., Araújo, M.B. 2018. Multiple interactions networks: towards more realistic descriptions of the web of life. *Oikos*, 127:5–22. doi:10.1111/oik.04428 (Editor's choice)
- [17] García-Callejas, D., Molowny-Horas, R., Retana, J. 2017. Projecting the distribution and abundance of Mediterranean tree species under climate change: a demographic approach. *Journal of Plant Ecology*, 10:731–743. doi:10.1093/jpe/rtw081 (Editor's choice)
- [18] García-Callejas, D., Araújo, M.B. 2016. The effects of model and data complexity on predictions from species distributions models. *Ecological Modelling*, 326:4–12. doi:10.1016/j.ecolmodel.2015.06.002

# PUBLICATIONS UNDER REVIEW AND PREPRINTS

- [19] García-Callejas, D., Lavorel, S., Ovaskainen, O., Peltzer, D., Tylianakis, J.M. Species traits and landscape structure can drive scale-dependent propagation of effects in ecosystems. Under 2nd round of review in *Nature Communications*. Preprint available: doi:10.1101/2023.11.15.567315
- [20] García-Callejas, D., Thébault, E., Lajaaiti, I., Martins, L.P., Laux, L., Kéfi, S. Ecological networks across interaction types are modular and driven by sampling intensity at biogeographical scales. Under review in *Ecography*. Preprint available: doi:10.1101/2024.12.04.626839
- Melero. Y., Stefanescu, C., García-Callejas, D.. Beyond community-weighted means: quantifying trait distributions for detecting community assembly patterns. Under review in *Functional Ecology*.
   Preprint available: doi:10.1101/2024.12.18.629105

[22] Ickin, E., Conquet, E., Abrahms, B., Albon, S.D., Blumstein, D.T, Bond, M., Boersma, P.D., Clark-Wolf, T.J., Clutton-Brock, T., Compagnoni, A., Dostálek, T., Evers, S.M., Fichtel, C., Gamelon, M., García-Callejas, D., Hansen, B.B., Jenouvrier, S., Jerstad K., Kappeler, P.M., Lee, D.E., Malchow, A-K., Manser, M.B., Martin, J.G.A., Münzbergová, Z., Nater, C.R., Pillay, N., Querou, M., Røstad, O.W., Schradin, C., Sæther B.E., Ozgul, A., Paniw, M. Comparative Life-Cycle Analyses Reveal Interacting Climatic and Biotic Drivers of Population Responses to Climate Change. Under review in *Nature Ecology and Evolution*.

Preprint available: doi:10.32942/X24C92

- [23] Barnes, A.D., Brose, U., Eisenhauer, N., Braun, M., Korobushkin, D., García-Callejas, D., Giling, D., Hines, J., Jochum, M., O'Gorman, E., Nordström, M.C., Ott, D., Perkins, D.M., Rosenbaum, B., Vinagre, C., Eggert, S., Hall, R.O., Kortsch, S., Manca, M., McLaughlin, J.P., Mor, J.R., Saifutdinov, A., Saito, V.S., Tanentzap, A.J., Gauzens, B. Food Web Complexity Underpins the Relationship Between Biodiversity and Ecosystem Functioning Across Ecosystems. Submitted.
- [24] Izquierdo-Palma, J., Hernández-Brito, D., Hiraldo, F., García-Callejas, D., Tella, J.L., Carrete, M. Multi-layer networks reveal changes in plant-bird interactions driven by invasive species. Submitted.

### CONGRESS PARTICIPATION

- [25] Poster: García-Callejas, D. Spread of ecological effects across space: mechanisms and empirical insights from a large-scale plant-frugivore community. In BES 2024 Meeting, 10-13/12/2024.
- [26] Session chair: Bringing together theory and data to understand ecological communities. In  $Gf\ddot{O}$  2024 Conference, 09-12/09/2024.
- [27] Talk: García-Callejas, D., Lavorel, S., Ovaskainen, O., Peltzer, D.A., Tylianakis, J. Species traits and community structure can drive scale-dependent propagation of effects in ecosystems. In *GfÖ 2024 Conference*, 09-12/09/2024.
- [28] Talk: García-Callejas, D., Godoy, O, Hurtado, M., Buche, L., Lanuza, J.B., Allen-Perkins, A., Bartomeus, I. Stability of multi-trophic communities: more than the sum of its parts. In: AEET 2021 Meeting, 18-21/10/2021.
- [29] Talk: García-Callejas, D., Bartomeus, I., Godoy, O. Species-area relationships emerge from multiple coexistence mechanisms. In: BES 2020 Meeting, 14-18/12/2020.
- [30] Talk: García-Callejas, D., Bartomeus, I., Hurtado, M., Godoy, O. Variability of an ecological multilayer network across space and interaction types. In: *NetSci conference*, 20-24/08/2020.
- [31] Talk: García-Callejas, D., Godoy, O., Bartomeus, I. cxr: a toolbox for modelling species interactions and coexistence in R. In: BES Quantitative Ecology Meeting, 27-30/07/2020.
- [32] Talk: García-Callejas, D., Molowny-Horas, R., Araújo, M.B., Gravel, D. Spatial cascades in networks connected by dispersal and foraging. In: SIBECOL, Barcelona, 04–07/02/2019.
- [33] Talk: García-Callejas, D., Molowny-Horas, R., Araújo, M.B. Species persistence in networks with multiple interaction types. In: *NetSci conference*, Paris, 11–14/06/2018.
- [34] Talk: García-Callejas, D. The influence of trophic position on Species Abundance Distributions. In: *Ecology across borders*, Ghent, 11–14/12/2017.
- [35] Poster: García-Callejas, D., Molowny-Horas, R., Araújo, M.B. Multiple interactions networks: towards more realistic descriptions of the web of life.In: *Community Ecology for the*

# **INVITED TALKS**

- [36] García-Callejas, D. Signatures of spatial cascades mediated by dispersal and foraging in trophic metacommunities. In: Workshop: Spillover effects of natural enemies on heterogeneous landscapes, Estación Experimental de Zonas Áridas (EEZA-CSIC), 09/06/2023.
- [37] García-Callejas, D. How can so many species coexist? An exploration of space and ecological interactions. In: Alfred Wallece Seminar Series, University of Evora, 04/04/2023.
- [38] García-Callejas, D. Análisis de dinámicas poblacionales en R. In: AEET Ecoinformatics seminars, 06/06/2022.
- [39] García-Callejas, D. Towards understanding how species coexist in complex ecological communities. In: Doñana Biological Station, Sevilla, 03/03/2022.
- [40] García-Callejas, D., Molowny-Horas, R., Araújo, M.B. Multiple interactions networks in community ecology: towards more realistic representations of the web of life. In: *Centre for Advanced Studies*, Blanes, 10/01/2019.
- [41] García-Callejas, D., Molowny-Horas, R., Retana, J. Distribution and abundance of tree species: A spatially explicit model for Peninsular Spain. In: Forest sciences centre of Catalonia, Solsona, 10/12/2012.

## SOFTWARE DEVELOPED

R package *CXR*, downloaded > 11000 times, available at CRAN (stable version): https://cran.r-project.org/web/packages/cxr/index.html GitHub (development version): https://github.com/RadicalCommEcol/cxr

# **RESEARCH PROJECTS**

As Principal Investigator:

**HOROS: Biotic interactions and ecological predictability** October 2024 to October 2027 Funding entity: Austrian Science Fund Amount granted: 340.819€

NETMAP: Advancing the biogeography of interaction networks2021Funding entity: Spanish Association for Terrestrial Ecology2021Amount granted: 2.500€2021

As work team member:

CORREDORAS: Stability and resilience of plant communities on long-term scales: assessing cooccurrence ecological networks from palaeoenvironmental records 2023-2026 PI: Dr. Graciela Gil-Romera Funding entity: Ministry of Science and Innovation (Spain) Amount granted: 201250€

LIFECAST: The stabilizing role of life-history feedbacks in forecasting climate-change impacts in multitrophic communities 2023-2026 PI: Dr. Maria Paniw Funding entity: Ministry of Science and Innovation (Spain) Amount granted: 243750€

Biological heritage National Science Challenge: propagation of ecological impacts 2021-2024

PI: Prof. Jason M. Tylianakis Funding entity: New Zealand Science Ministry Amount granted: -

TASTE: The effect of temporal variability of species interactions on the stability and of ecosystems PI: Dr. Oscar Godoy	functioning 2021-2024
Funding entity: Ministry of Science and Innovation (Spain) Amount granted: 165770€	
MEDINAS: Mechanisms of maintenance of species diversity in variable environments         PI: Dr. Oscar Godoy         Funding entity: Ministry of Science and Innovation (Spain)         Amount granted: 125000€	3 2019-2022
SIMPLEX: Simple models to capture the complexity of multitrophic interactions PI: Dr. Ignasi Bartomeus Funding entity: Ministry of Economy and Competitiveness (Spain) Amount granted: 40000€	2018-2019
<ul> <li>Puntos de inflexión en la organización de redes tróficas bajo el cambio climático</li> <li>PI: Prof. Miguel B. Araújo</li> <li>Funding entity: Ministry of Science and Innovation (Spain)</li> <li>Amount granted: 53361€</li> </ul>	2016-2019

# ORGANISATIONAL WORK

1st AEET Festival of Ecology full program: https://www.aeet.org/es/comisiones/ecr/festival.html	18-20 May 2022
1st Joint AEET-SFE2 Conference for Early Career Scientists full program: http://www.aeet.org/forms/ECR_conference	09-11 June 2021

### **REFEREE SERVICE**

Evaluator for the AEET Project Grants for Early Career Researchers	2023  call
Evaluator for the United States' National Science Foundation Grants Program	2020 call

Reviewer for scientific journals (> 35 reviews since 2016): Global Ecology and Biogeography, Ecography, Journal of Ecology, Nature Ecology and Evolution, mSystems, Functional Ecology, Hystrix, Oikos, Ecology and Evolution, Journal of Animal Ecology, Journal of Environmental Informatics, Ecology Letters, Science, Nature Climate Change, Methods in Ecology and Evolution, Nature Communications, American Naturalist, Proceedings of the Royal Society B, Web Ecology.

### COMMUNICATION AND OUTREACH

Understanding impact propagation to enhance conservation efforts: Interview

Biodiversity in Doñana (in Spanish): Interview in Youtube

News outlets on restoring species interactions (in Spanish): [1] [2] [3] [4] [5] [6]

## TEACHING EXPERIENCE

### TEACHING ACCREDITATIONS

Profesor Ayudante Doctor Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA, Spain) Reference: 2020-4180	2020
Profesor Contratado Doctor Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA, Spain) Reference: 2024-3824	2024
Profesor de Universidad Privada Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA, Spain) Reference: 2024-3825	2024
Professor Lector Agència per a la Qualitat del Sistema Universitari de Catalunya (AQU) Reference: GLLB38S57	2024

## TEACHING POSITIONS

Note: here are only listed positions with a specific teaching assignment. Teaching imparted during my Ph.D. or in other institutions did not involve specific contracts.

External Professor Universitat Autònoma de Barcelona	2021/22 to 2023/2024
External Professor Universidad de Huelva	2020/21 to $2021/2022$

# UNIVERSITY TEACHING ACTIVITIES

Note: in this section, the "number of teaching hours" refers to the number of officially recognised hours except when indicated explicitly. This is potentially different from the number of "raw" hours tought, depending on a coefficient that quantifies the additional time devoted to prepare each hour of teaching and the subsequent one-to-one student mentoring hours.

Degree: M.Sc. Terrestrial Ecology
Course: Name of activity or course: Advanced topics in terrestrial ecology (theory)
Academic year: 2023/2024
Number of teaching hours: 20,52
Institution: Autonomous University of Barcelona

Degree: B.Sc. Biology Course: 3rd Name of activity or course: Ecology (practical, field trip) Academic year: 2023/2024 Number of teaching hours: 4 Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Biology
Course: 1st
Name of activity or course: Ecology (practical, field trip, computer and seminars)
Academic year: 2023/2024

Number of teaching hours: 56,28 Institution: Autonomous University of Barcelona

Degree: M.Sc. Terrestrial Ecology Course: -Name of activity or course: Advanced topics in terrestrial ecology (theory) Academic year: 2022/2023 Number of teaching hours: 19,08 Institution: Autonomous University of Barcelona

Degree: B.Sc. Microbiology Course: 2nd Name of activity or course: Ecology (practical, seminars) Academic year: 2022/2023 Number of teaching hours: 30,24 Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Biology
Course: 3rd
Name of activity or course: Ecology (practical, field trip and computer)
Academic year: 2022/2023
Number of teaching hours: 41,58
Institution: Autonomous University of Barcelona

**Degree:** M.Sc. Terrestrial Ecology

Course: -Name of activity or course: Advanced topics in terrestrial ecology (theory) Academic year: 2021/2022 Number of teaching hours: 20,52 Institution: Autonomous University of Barcelona

Degree: B.Sc. Biology
Course: 3rd
Name of activity or course: Ecology (practical, field trip, computer and seminars)
Academic year: 2021/2022
Number of teaching hours: 48,72
Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Sciences
Course: 3rd
Name of activity or course: Ecology (practical, field trip, computer and seminars)
Academic year: 2021/2022
Number of teaching hours: 52,32
Institution: Autonomous University of Barcelona

Degree: M.Sc. Conservation Biology Course: -Name of activity or course: Advanced statistical methods for biodiversity conservation (theory and practical exercises) Academic year: 2021/2022 Number of teaching hours: 25 raw hours Institution: University of Huelva Other information/materials: https://github.com/garciacallejas/estadistica\_biodiversidad Degree: M.Sc. Conservation Biology
Course: Name of activity or course: Advanced statistical methods for biodiversity conservation (theory and practical exercises)
Academic year: 2020/2021
Number of teaching hours: 20 raw hours
Institution: University of Huelva
Other information/materials: https://github.com/garciacallejas/estadistica\_biodiversidad

Degree: M.Sc. Conservation Biology
Course: Name of activity or course: Advanced statistical methods for biodiversity conservation (theory and practical exercises)
Academic year: 2019/2020
Number of teaching hours: 5 raw hours
Institution: University of Huelva

Degree: B.Sc. Environmental Biology
Course: 1st
Name of activity or course: Analysis of environmental cartography (practical, computer)
Academic year: 2017/2018
Number of teaching hours: 19,54
Institution: Autonomous University of Barcelona

Degree: B.Sc. Biology
Course: 3rd
Name of activity or course: Analysis of vegetation cartography (practical, computer)
Academic year: 2017/2018
Number of teaching hours: 23,31
Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Biology Course: 1st Name of activity or course: Forest Ecology (theory) Academic year: 2017/2018 Number of teaching hours: 1,63 Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Biology
Course: 1st
Name of activity or course: Conservation Biology (theory)
Academic year: 2017/2018
Number of teaching hours: 12,34
Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Sciences
Course: 3rd
Name of activity or course: Ecology (practical, field trip and computer)
Academic year: 2016/2017
Number of teaching hours: 31,08
Institution: Autonomous University of Barcelona

Degree: M.Sc. Terrestrial Ecology
Course: Name of activity or course: Statistics and environmental modelling (practical, seminars)
Academic year: 2016/2017
Number of teaching hours: 1,14
Institution: Autonomous University of Barcelona

Degree: B.Sc. Environmental Sciences
Course: 3rd
Name of activity or course: Ecology (practical, field trip and computer)
Academic year: 2015/2016
Number of teaching hours: 31,08
Institution: Autonomous University of Barcelona

Degree: B.Sc. Biology
Course: 3rd
Name of activity or course: Ecology (practical, field trip and computer)
Academic year: 2015/2016
Number of teaching hours: 15,54
Institution: Autonomous University of Barcelona

Degree: M.Sc. Terrestrial Ecology Course: Name of activity or course: Statistics and environmental modelling (practical, seminars) Academic year: 2015/2016 Number of teaching hours: 1,14 Institution: Autonomous University of Barcelona

# OTHER TEACHING ACTIVITIES

Name of activity or course: Data analysis with R Academic year: 2022-2023 Number of teaching hours: 20 (theory and hands-on practice) Institution: Centre for Andalusian Studies (Centro de estudios andaluces) Other information/materials: https://github.com/garciacallejas/CEA\_IntroR\_2023

Name of activity or course: Introduction to data analysis with R Academic year: 2021-2022 Number of teaching hours: 12 (theory and hands-on practice) Institution: Centre for Andalusian Studies (Centro de estudios andaluces) Other information/materials: https://github.com/garciacallejas/CEA\_Intro\_R

Name of activity or course: Micro-introduction to R Academic year: 2021-2022 Number of teaching hours: 6h of asynchronous classes via recorded videos Institution: Centre for Andalusian Studies (Centro de estudios andaluces)

Name of activity or course: Reproducible analyses with R Academic year: 2020-2021

Number of teaching hours: 2 courses of 16h each (theory and hands-on practice) Institution: Centre for Andalusian Studies (Centro de estudios andaluces) Other information/materials: https://github.com/garciacallejas/CEA\_Reproducibilidad Name of activity or course: Introduction to data analysis with R Academic year: 2020-2021 Number of teaching hours: 16h (theory and hands-on practice) Institution: Centre for Andalusian Studies (Centro de estudios andaluces) Other information/materials: https://github.com/garciacallejas/CEA\_Intro\_R

## STUDENT SUPERVISION

Supervisor of 3 M.Sc. Theses and a expected Ph.D. to start in 2025 conditional on funding (Marta Suárez):

Marta Suárez 2024-2025 Butterflies in the city: The role of spatial structure in population dynamics and stability University of Granada (Spain) - co-supervised with Dr. Yolanda Melero.

## David Díaz Mulero

Diversity and structure of ecological networks in agricultural habitats Pablo de Olavide University (Sevilla, Spain) - co-supervised with Dr. Ignasi Bartomeus. Grade obtained: 8/10

Laura Buonafede Ecological filtering of butterfly species associations by urban environments University of Firenze/CREAF - co-supervised with Dr. Yolanda Melero. Grade obtained: 110/110

Member of 6 Ph.D. commissions ("comisión de seguimiento de doctorado"): Norka M. Fortuny-Fernández (ECOSUR-CONICET, Mexico) 2021-ongoing; Mónica Lanzas (UAB, Spain) 2022-2024; Olga Boet (UAB, Spain) 2021-2024; Nuria Jiménez (UAB, Spain) 2021-2024; Marc Vez-Garzón (UAB, Spain) 2024-ongoing; Erini Trypidaki (UAB, Spain) 2024-ongoing.

# SCIENTIFIC WORKSHOPS AND SEMINARS DELIVERED

Improving the reproducibility of ecological studiesseCenter for Advanced Studies CEAB-CSIC (Blanes, Spain)se	cheduled for March 2025
Optimizing the use of R for a reproducible science King's College, Geography Department (London, UK).	05-6 September 2022
Managing your R code towards reproducibility 27th DZG Graduate Meeting in Evolutionary Biology (Bielefeld, German	01 April 2022 ny).
Taller de simulación de dinámicas poblacionales en R 1st AEET Festival of Ecology (El Rocío, Spain).	19 May 2022

2021-2022

2021-2022