

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	Macarena		
Family name	Ros Clemente		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0001-8074-0778	

(*) Mandatory

A.1. Current position

Position	Senior lecturer (<i>Profesora Titular de Universidad</i>)		
Initial date	04/07/2024		
Institution	University of Seville		
Department/Center	Zoology	Faculty of Biology	
Country	Spain	Teleph. number	
Key words	Biological invasions, Fouling, Recreational marinas, Marine Invertebrates, Ecology and taxonomy of peracarid crustaceans		

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

Period	Position/Institution/Country/Interruption cause
(19/10/2021-19/03/2022)	Maternity leave for 6 months
30/07/2021-03/07/2024	Lecturer/ Univeristiy of Seville/ Spain
01/02/2021-29/07/2021	Interim Lecturer/ Univeristiy of Seville/ Spain
01/06/2020-30/01/2021	Postdoctoral Fellow Juan de la Cierva Incorporación / Univeristiy of Seville/ Spain
01/02/2019-30/05/2020	Postdoctoral Fellow Juan de la Cierva Incorporación / Univeristiy of Cádiz/ Spain
01/02/2017-31/01/2019	Postdoctoral Fellow Juan de la Cierva Formación / Univeristiy of Cádiz/ Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Integrated Biology	University of Seville / Spain	2015
MSc in Oceanography	University of Cádiz / Spain	2011
BSc in Biology	University of Seville / Spain	2010

(Include all the necessary rows)

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

1. I developed my PhD thesis at the University of Sevilla (US) funded mainly through two competitive predoctoral fellowships, the PIF (Personal Investigador en Formación) fellowship of the University of Seville and the FPU (Formación de Profesorado Universitario) fellowship of the Government of Spain. During my PhD, which I defended in 2015, I mainly focussed on the invasion dynamic and vectors of introduction of small mobile marine epibenthic species, a poorly studied component of marine benthic ecosystems. I addressed this issue from a multidisciplinary approach (combining taxonomical, ecological, biogeographical, behavioural and physiological perspectives), thanks to the development of an extensive collaboration network with researchers from different countries and institutions. During my postdoctoral



research at different institutions, including the University of Cádiz (UCA), as Juan de la Cierva formación and then Juan de la Cierva Incorporación, the University of New South Wales (Australia), as visiting researcher thanks to a José Castillejo Fellowship, or the University of Montpellier (France), I explored the interplay of marine bioinvasions and other global change drivers, such as climate change, coastal urban sprawl and environmental pollution, especially the role of floating marine debris as vector for the introduction and spread of non-indigenous species. This research has been national and international recognized by several awards. In 2017 I received the Francesca Gherardi Memorial Prize 2017 for research in the field of Biology of Invasive Aquatic Animals by the University of Florence and in 2018 the Young Researchers award by the Royal Academy of Sciences of Seville and the Extraordinary Doctorate Science Award by the US. I have published more than 70 publications, mostly related to marine bioinvasions (intimately related to the current project), 54 of them in SCI indexed journals. These articles have received almost 1000 citations (1051 based on WOS and 1140 on SCOPUS; h-index 21 or 22 respectively). I have participated in 9 projects (2 as principal investigator). I have been involved in the organizing committee of 5 national scientific conferences and one international congress, and I have contributed with more than 50 participations in national and international congresses (7 of them being invitation talks). Currently, I am senior lecturer at the University of Sevilla since 2024, where I have been working except for the months I was on maternity leave (October-March 2021).

As proof of leadership on my main research topic (marine bioinvasions) both nationally and internationally, I am an invited Chair-member of the international working group WGITMO (Working Group on Introduction and Transfers of Marine Organisms) belonging to ICES (International Council for the Exploration of the Sea) since 2021, and I hosted and coorganized the 2024 WGITMO Meeting in Seville. At national level, I belong to the Spanish Network on Biological Invasions (InvaNET) and on invasive macroalgae (REMMI). I have been part of the group of experts on marine bioinvasions for two LIFE projects (LIFE Invasaqua and LIFE Intemares).

2. My commitment to the transfer of my research to society has materialized in my participation in divulgative projects, such as “CALEPUZLES: Juega y aprende con los animales y algas de La Caleta (DIV2022-005)”, development of the mobile APP of the UCA “Ruta científica por La Caleta”, several talks in public secondary institutes, divulgative events such as the “Noche Europea de los Investigadores” or “Charla-coloquio científica en el bar Pay-Pay” (organized by ICMANN-CSIC), as well as TV, radio or newspapers social-media interviews. I am a co-inventor of a patent granted in 2014 and managed by the US. Moreover, I am member of the “Sociedad Gaditana de Historia Natural (SGHN)” since 2019.

3. Regarding to my training experience, I have directed and coordinated a postgraduate course on marine bioinvasions at the University of Cádiz in 2018. Moreover, I have directed a PhD thesis on the role of marinas in the transport of exotic crustaceans (awarded with the San Alberto Magno prize for the best PhD thesis defended at the US). I am currently supervising another PhD thesis funded by a FPU fellowship and focused on exotic bryozoans. Moreover, I have supervised 12 bachelor's (BSc) and master's theses (MSc) in total. One received the Italian MSc award “Prof. Emilio Gatti prize 2020” and other the BSc national award “1º Premio de TFG del Colegio Oficial de Biólogos de Andalucía”, helping to boost their careers as young scientists. Since 2023, I evaluate projects for the AVAP (I+D+i – Agència Valenciana d'Avaluació i Prospectiva). Moreover, I have been reviewed more than 20 publications in SCI indexed journals, and I have been Topic Editor in Frontiers in Marine Science.

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

C.1. Publications (*see instructions*)

1. Sempere-Valverde J, Castro-Cadenas MD, Guerra-García JM, Espinosa F, García-Gómez JC, **Ros M** (2024) Buoys are non-indigenous fouling hotspots in marinas regardless of their environmental status and pressure. SCIENCE OF THE TOTAL ENVIRONMENT, 909, 168301

2. **Ros M**, Ashton GV, Cabezas MP, Cacabelos E, Carlton JT, Ferrario J, García-de-Lomas J, Gestoso I, Marchini A, Ruiz G (2023) Chapter 4. Marine bioinvasions in the anthropocene: challenges and opportunities. In: Coastal Habitat Conservation: New Perspectives and Sustainable Development of Biodiversity in the Anthropocene. Editor: Free Espinosa. Ed.: **Elsevier**. Pp81-11. ISBN: 978-0-323-85613-3
3. **Ros M**, Guerra-García JM, Lignot JH, Rivera-Ingraham G (2021) Environmental stress responses in sympatric congeneric crustaceans: explaining and predicting the context-dependencies of invader impacts. MARINE POLLUTION BULLETIN, 170, 112621
4. Guerra-García JM, Navarro-Barranco C, Martínez-Laiz G, Moreira J, Giráldez I, Morales E, Fernández-Romero A, Florido M, **Ros M** (2021) Assessing pollution levels in marinas: an integrative approach. SCIENCE OF THE TOTAL ENVIRONMENT, 286, 112237
5. **Ros M**, Navarro-Barranco C, González-Sánchez M, Ostalé-Valriberas E, Cervera-Curado L, Guerra-García JM (2020) Starting the stowaway pathway: the role of dispersal behavior in the invasion success of low-mobile marine species. BIOLOGICAL INVASIONS 22(9), 2797-2812
6. **Ros M**, Cabezas MP, Guerra-García JM (2019) La importancia de los puertos deportivos en la introducción de especies exóticas marinas en la Península Ibérica: los crustáceos caprellidos como modelo de estudio (pp. 67-79). En: Junoy J (Ed.) Especies exóticas invasoras. Cátedra Parques Nacionales. Universidad de Alcalá, Servicio de Publicaciones. Monografías Ciencias, 6: 227 pp. ISBN: 978-84-17729-30-1.
7. Martínez-Laiz G*, Aylin U, **Ros M**, Marchini A (2019) Is recreational boating a potential vector for non-indigenous peracarid crustaceans in the Mediterranean Sea? A combined biological and social approach. MARINE POLLUTION BULLETIN 140, 403-415.
8. **Ros M**, Lacerda MB, Vázquez-Luis M, Masunari S, Guerra-García JM. 2016. Studying exotics in their native range: Can introduced fouling amphipods expand beyond anthropogenic habitats? BIOLOGICAL INVASIONS 10, 2983–3000
9. **Ros M**, Vázquez-Luis M, Guerra-García JM. 2015. Environmental factors modulating the extent of impact in coastal invasions: The case of a widespread invasive caprellid (Crustacea: Amphipoda) in the Iberian Peninsula. MARINE POLLUTION BULLETIN 98, 247-258
10. **Ros M**, Ashton GV, Lacerda MB, Carlton JT, Vázquez-Luis M, Guerra-García JM, Ruiz GM. 2014. The Panama Canal and the transoceanic dispersal of marine invertebrates: Evaluation of the introduced amphipod *Paracaprella pusilla* Mayer, 1890 in the Pacific Ocean. MARINE ENVIRONMENTAL RESEARCH 99, 204-211

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. Evaluación Ambiental de Cuevas Submarinas: Monitorización de Impactos y Gestión de un Habitat Clave y Amenazado. Proyectos de Transición Ecológica y Transición Digital TED2021-129725A-I00. Ministerio de Ciencia e Innovación. IP: Navarro-Barranco C (Universidad de Sevilla). Duración: 01/12-72022 – 30/11/2024. Cuantía económica: 82.800 €. Participación: equipo de trabajo (alta: 01/10/2023)
2. Improving the ecological state of marinas by using animal forests as nature-based solution ANIMAL FOREST. Fundação para a Ciência e a Tecnologia (Portugal). IP: Puri Veiga (Universidad do Porto, Portugal). Equipo compuesto por las siguientes entidades: Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), Centre of molecular and Environmental Biology (CBMA), University Autónoma of Madrid (UAM) y University of Sevilla (US). IP: Puri Veiga (CIIMAR, Portugal). Duración: 01/01/2023-

30/06/2024. Cuantía económica: 49.970 €. Participación: investigadora

3. Aves acuáticas como vectores de plásticos y nutrientes entre vertederos y humedales andaluces GUANOPLASTIC. Proyectos de I+D+i en el Marco del I Plan Andaluz de Investigación, Desarrollo e Innovación (PAIDI 2020). Consejería de Transformación Económica, Industria, Conocimiento y Universidades (JUNTA DE ANDALUCÍA). Duración: 01/10/2021 - 31/03/2023. IP: Green AJ (Estación Biológica de Doñana, CSIC). Cuantía económica: 163.612,5 €. Participación: investigadora
4. Estudio integrado del efecto de los puertos deportivos en las comunidades bentónicas del litoral andaluz: especies invasoras y nuevas herramientas de gestión ambiental (US-1265621). Proyectos de I+D+i en el Marco del Programa Operativo FEDER Andalucía 2014-2020. Consejería de Economía y Conocimiento (JUNTA DE ANDALUCÍA). Duración: 01/06/2020 - 31/08/2022. IP: **Ros M.** 28.790 €. Participación: investigadora principal
5. La importancia de los puertos deportivos en el establecimiento y dispersión de especies invasoras. La epifauna móvil como modelo de estudio (CGL2017-82739-P). MINISTERIO DE EDUCACION Y CIENCIA. Duración: 01/01/2018 - 31/12/2021. IP: Guerra-García JM (Universidad de Sevilla). 65.000 €. Participación: investigadora
6. Influencia de la macroalga invasora *Rugulopterix okamurae* sobre la macrofauna asociada a sustratos sésiles del coralígeno. INSTITUTO DE ESTUDIOS CEUTIES. Duración: 01/07/2018 - 30/06/2019. IP: Navarro-Barranco C (Universidad de Sevilla). 4.000 €. Participación: investigadora
7. La Caleta (Cádiz) e intermareales rocosos asociados: una ventana permanente al conocimiento de la biodiversidad marina. FUNDACIÓN BIODIVERSIDAD. Duración: 01/02/2018 - 31/12/2018. IP: Cervera JL. 29.542 €. Participación: investigadora
8. Crustáceos caprélidos invasores de las costas andaluzas: aplicaciones en acuicultura (P11-RNM-7041). JUNTA DE ANDALUCÍA (PROYECTOS DE EXCELENCIA). Duración: 26/03/2013-01/09/2017. IP: Guerra-García JM. 167.172 €. Participación: investigadora
9. Crustáceos marinos asociados al puerto deportivo de Ceuta: detección de especies exóticas y herramientas de monitorización. INSTITUTO DE ESTUDIOS CEUTIES. Duración: 01/07/2015 - 30/06/2016. IP: **Ros M.** 4.000 €. Participación: investigadora principal
10. Crustáceos caprélidos invasores del Mediterráneo y Atlántico Norte: distribución, ecología, taxonomía molecular y aplicaciones en acuicultura (CGL2011-22474). MINISTERIO DE EDUCACION Y CIENCIA. Duración: 01/01/2012 - 31/12/2014. IP: Guerra-García JM (Universidad de Sevilla). 49.000 €. Participación: investigadora

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

Patent: Guerra-García JM; Baeza-Rojano E; Cabezas MP; Ros M; Díaz-Pavón JJ. P201100380. Liofilizado de crustáceos caprélidos (*Caprella* spp) como alimento para peces España. 09/01/2014. Universidad de Sevilla.