

## 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	Gabriel		
Family name	Jordà Sánchez		
Gender (*)	H	Birth date (dd/mm/yyyy)	24/09/1975
Social Security, Passport, ID number			
e-mail	gabriel.jorda@ieo.csic.es	URL Web <a href="https://macmolab.wordpress.com/">https://macmolab.wordpress.com/</a> <a href="http://www.ba.ieo.es/">http://www.ba.ieo.es/</a>	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-2782-8727	

(\*) Mandatory

#### A.1. Current position

Position	Research Professor ( <i>Profesor de Investigación OPI</i> )		
Initial date	7/5/2024		
Institution	CN Instituto Español de Oceanografía (IEO-CSIC)		
Department/Center	Centre Oceanogràfic de Balears		
Country	Spain	Teleph. number	+34 971133720
Key words	Oceanography, numerical modelling, climate, global change		

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

Period	Position/Institution/Country/Interruption cause
1998-2005	Research assistant/PhD Student – Politechnical University Catalonia
2005-2008	Post-doctoral researcher - Politechnical University Catalonia
2008-2013	Post-doctoral researcher – IMEDEA (University of Balearic Islands/CSIC)
2014-2018	Ramon y Cajal fellow – University of Balearic Islands
2018-2024	Research Scientist – Spanish Institute of Oceanography

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Msc in Physics	University of Balearic Islands	1998
PhD in Marine Sciences	Politechnical University Catalonia	2005

(Include all the necessary rows)

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

My scientific career began after obtaining a **degree in Physics** from the University of the Balearic Islands (UIB) in 1998. I started working at the UPC's Maritime Engineering Laboratory (LIM / UPC) dedicated to the development and implementation of ocean numerical models to various problems of coastal oceanography such as the dispersion of pollutants or circulation in ports. Subsequently, I completed a **28-month stay** at the Laboratoire d'Études Geophysiques in Toulouse (France) where I worked on data assimilation methods with Dr. Pierre de Mey and in numerical modeling with Dr. Patrick Marsaleix. This work resulted in the main body of my doctoral thesis that included the first exhaustive characterization of the physical processes that govern the northeast of the Iberian Peninsula and new methods of assimilation of data for coastal areas.



Later I did **post-doctoral stays in the LIM / UPC** where I applied numerical methods to a wide range of problems in coastal oceanography, operational oceanography and physical-biology interactions. Much of this work had a transfer to society as the relocatable model for marine emergencies that was used in the Prestige crisis and the sinking of Don Pedro or the water quality system in ports. In 2008 I moved to the Institut Mediterrani d'Estudis Avançats (IMEDEA, UIB / CSIC) where I have worked until July 2018. There I started designing the L3 mapping algorithm for the SMOS space mission and then, starting in 2010, to dedicate myself to what has been my main line of research, the study of the marine climate and its interactions with biological systems.

In marine climate research I have dedicated myself to the generation of robust information on the evolution of marine parameters for both the past and the future. For this I worked on the first set of wave simulations and "storm surge" for southern Europe and on the theoretical foundation that should be applied to the projections of the sea level for the Mediterranean. I have also led several international initiatives for the development of marine climate models of the Mediterranean (TANGRAM, MedCORDEX) and I have generated several climatic reconstructions for the Mediterranean (waves, sea level, hydrography). In parallel, I have worked on the interaction between climate and marine ecology and how global change can affect coastal ecosystems and fisheries. This line of work has also had a direct transfer to society such as the generation of the official marine climate scenarios for AEMET or the conversion plan for Playa de Palma. Within the framework of this line I made **stays in Southampton** (UK, 12 months) and in **Boulder** (USA, 12 months).

Since 2018 I am **Scientific Researcher at the CN-Spanish Institute of Oceanography** and I have recently won a Research Professor position at CSIC. In the last 6 years I have consolidated my line of research by assembling a team of 8 people, organizing a new climate modeling laboratory and opening a research line in low-cost oceanographic technology. In this last period, more than 45 SCI publications have been made and 7 projects and 3 contracts have been obtained,

Overall, the fruit of my career has been participation in **more than 100 SCI publications** (>80 in Q1), including Nature Climate Change, BAMS or Scientific Reports, most of them as first or second author (Scopus Factor -h: 29, Citations> 2900; Scholar Google Factor-h: 34, Citations> 4200). I have three 6-yr Research Periods recognized and I have worked on 31 projects and 13 research contracts with a marked multidisciplinary nature. I have been the **PI of 9 projects** (6 national, 3 international initiatives) **and 6 contracts**, as well as responsible for 4 working groups in international projects. I have had several **international awards** and I am currently the **coordinator** of the **CLIVAR-Spain** and **MedCORDEX** committee and a member of the scientific committee of HYMEX, MedCLIVAR, MEDECC. I regularly participate in project evaluation at regional, national and EU level and act as a referee in SCI journals (incl. Nature, BAMS). Regarding the **transfer to society**, I regularly participate in the training of scientists at different levels (**3 completed PhD, 2 active PhD, 7 MSc, 4 BSc**), I am a member of the **Committee of Experts for the Energy Transition and Climate Change** of the Balearic Islands and I lead a **pioneer project of citizen science** in secondary education centers that involves about 1,500 students each year since 2018

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

### **C.1. Publications** (*see instructions*)

1. Amores A., Monserrat S., Marcos M., Argüeso D., Villalonga J., Jordà G., Gomis D. Numerical Simulation of Atmospheric Lamb Waves Generated by the 2022 Hunga-Tonga Volcanic Eruption. Geophysical Research Letters, 49 (6), art. no. e2022GL098240 (2022) (cited by 90)
2. Soto-Navarro J., Jordà G. Deudero S., Alomar C., Amores A., Compa M., 3D hotspots of marine litter in the Mediterranean: A modeling study. Marine Pollution Bulletin 155 art. No. 111159 (2021) (cited by 39)

3. G. Jordà, N Marbà, S Bennett, J Santana-Garcon, S Agusti, CM Duarte *Ocean warming compresses the three-dimensional habitat of marine life* Nature ecology & evolution 4 (1), 109-114 (2020) (cited by 59)
4. J Soto-Navarro, G. Jordà et al (2/10) *Evolution of Mediterranean Sea water properties under climate change scenarios in the Med-CORDEX ensemble* Climate Dynamics 54 (3), 2135-2165 (2020) (cited by 69)
5. A Amores, G. Jordà, T Arsouze, J Le Sommer. Up to what extent can we characterize ocean eddies using present-day gridded altimetric products? Journal of Geophysical Research: Oceans 123 (10), 7220-7236 (2018) (cited by 93)
6. Jordà G., et al (1/17). *The Mediterranean Sea Heat and Mass Budgets : Estimates, Uncertainties and Perspectives*. Progress in Oceanography 156 174–208 (2017) (cited by 43)
7. Ruti PM. et al. (9/20) *MED-CORDEX initiative for Mediterranean Climate studies*. Bulletin of the American Meteorological Society. (1) Vol.:1. Pág.:1-20. (2016) (cited by 228)
8. Adloff et al. (4/13) Mediterranean Sea response to climate change in an ensemble of twenty first century scenarios. Climate Dynamics, Volume 45, Issue 9, pp 2775-2802 45: (2015) (cited by 181))
9. Marbà, N; Jordà, G; Agusti, S; Girard, C; Duarte, C M. *Footprints of climate change on Mediterranean Sea biota*. Frontiers in Marine Science. Vol.: 2:56. (2015) (cited by 144)
10. Jordà, G.; Marbà, N; Duarte, C.; *Mediterranean seagrass vulnerable to regional climate warming*. Nature Climate Change. (11) Vol.:2. Pág.:821-824. (2012) (cited by 262)

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

More than **200 contributions to conferences** (150 internationals) of which **22 as invited talks**.

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

Participation in 31 R+D projects. Only the 10 last projects that I'm leading are included (PI responsibilities as well as project design, supervision and execution of several tasks).

1. **BELICH-Modelización**. Modelización hidrodinámica e implementación de un sistema operacional del Mar Menor 495000€. MITECO (2023-2026). PI: G. Jordà.
2. **SEAFRONT** Papel de las praderas submarinas en la mitigación de impactos del cambio climático Ministerio de Ciencia e Innovación (2022-2024). 110000€ Coordinador PI: G. Jordà
3. **UNCHAIN**. Unpacking climate impact chains, JPI-AXIS, European Commission, 2019-2022. Spanish Funding Ministerio de Ciencia, Innovación y Universidades PCI2019-103680 Grant:198000€ PI G. Jordà
4. **DECIMATE**. Descubriendo el medio marino con tecnología de bajo coste Ministerio de Ciencia e Innovación. FECYT - 16093 (2021-2022). Grant: 32000€ coPI:G. Jordà
5. **VENOM**. Variabilidad Espacial del Nivel del Mar Mediterráneo. Ministerio de Ciencia e Innovación (2018-2021) Ministerio de Ciencia, Innovación y Universidades PGC2018-099285-B-C12/C22 Grant: 153670€ coPI:G. Jordà
6. **CLIFISH**. Variabilidad climática y pesquerías en el siglo XXI: Efectos del cambio global sobre poblaciones y comunidades neobentónicas. Ministerio de Economía y Competitividad. 2016-2018. CTM2015-66400-C3-2-R. Grant: 120.000€. PI: G. Jordà.
7. **SOCLIMPACT**. DownScaling CLimate imPACTs and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond. European Commission H2020. 2017-2020. Grant: 4.5 M€ (to our group: 198.000€). PI: Carmelo León (G.Jordà responsable de grupo de trabajo)

8. **Divulgació sobre l'impacte del canvi climàtic al medi marí.** Acción Especial de Investigación y Desarrollo CAIB. 2017-2018. Grant: 11.488€ PI: G. Jordà
9. **TANGRAM** - Towards a New Generation of Mediterranean Climate Models, Programa ENVIMED-MISTRALS (Ministerio Asuntos Exteriores, Francia), 2015-2016 Grant: 20.000€ PI: G. Jordà
10. **MedMAHB** - The mediterranean sea mass and heat budget: understanding its forcings, uncertainties and time evolution. , Programa ENVIMED-MISTRALS (Ministerio Asuntos Exteriores, Francia), 2014-2015 Grant: 20.000€ PI: G. Jordà y K. Von Schukmann

**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

I have been participated in 13 research contracts with public and private bodies. Here, only the last 10 are mentioned.

1. **COASTWAVE-UNESCO** Contrato de la UNESCO para la construcción e instalación de mareógrafos en Marruecos, Egipto y Chipre (2023) 24000€ PI: G. Jordà
2. **Research Contract** For the development and assessment of a Marine Litter forecasting system "PLASTIC BUSTERS MPAS". (2018-2021). Grant: 90000€ PI: G. Jordà
3. **CRED.** Policy Advice for climate-resilient economic development. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). 2020. Grant: 20000€ PI: G. Jordà
4. **REDTEMP.** 21 Century Warming Scenarios for the Red Sea: Horizontal and Warming Vertical Velocity and Performance Scope for a Key Seagrass Species. KAUST Award (2018-2019) Grant: 150000€ coPI: G. Jordà
5. **WACMOSMED** -STSE Water Cycle Multi-mission Observation Strategy for the Mediterranean. Agencia Espacial Europea. 2015-2017. Grant: 400.000€ (60.000€ for our group). IP: F. Aires (G. Jordà PI of WP6 Responsible for the seawater budget monitoring).
6. **ESCENARIOS.** Convenio para el desarrollo, validación y aplicación de modelos oceánicos regionales AEMET . 2010-2012. Grant: 300.000€ IP: E. Álvarez-Fanjul (G. Jordà Responsible of numerical product development)
7. **La recalificación integral de playa de palma en el eje de sostenibilidad: cambio climático y biodiversidad.** Consorcio de la Playa de Palma 2009-2011 Grant: 500.000€ IP: B. Morales (G. Jordà Responsible of numerical product development)
8. **Convenio para el desarrollo de un programa de control de la calidad de agua en zonas portuarias (mediante simulación numérica y observaciones).** Ente Público Puertos del Estado 2007-2009. Grant: 120.000€ IP: A. Sánchez-Arcilla (G. Jordà Responsible of numerical product development)
9. **P34 - SMOS PROJECT** (Soil Moisture and Ocean Salinity Mission) Institut de Ciències del Mar (ICM-CSIC). 2007-2009 Grant: 100.000€ IP: D. Gomis (G. Jordà Responsible for the spatial mission L4 algorithm development)