



**CURRICULUM VITAE (CVA)**

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

**Part A. PERSONAL INFORMATION**

**CV date**

14/11/2022

First name	Jorge Miguel		
Family name	Terrados Muñoz		
Gender (*)	Male	Birth date (dd/mm/yyyy)	05/07/1962
Social Security, Passport, ID number	27431617T		
e-mail	terrados@imedea.uib-csic.es	URL Web <a href="https://imedea.uib-csic.es/el-instituto/personal/?staff_id=365">https://imedea.uib-csic.es/el-instituto/personal/?staff_id=365</a>	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-0921-721X		

(\*) Mandatory

**A.1. Current position**

Position	Científico Titular/Staff Scientist		
Initial date	01/09/2000		
Institution	Agencia Estatal Consejo Superior de Investigaciones Científicas		
Department/Center	IMEDEA	<a href="https://imedea.uib-csic.es/">https://imedea.uib-csic.es/</a>	
Country	Spain	Teleph. number	971611830
Key words	Seagrass, seedling, restoration ecology		

**A.2. Previous positions (research activity interruptions, art. 14.2.b))**

Period	Position/Institution/Country/Interruption cause
01/02/1999 - 31/08/2000	Postdoc Researcher MEC, CSIC, Spain
16/07/1995 - 30/06/1998	Postdoc Researcher MEC, CSIC, Spain
16/01/1995 - 15/06/1995	Postdoc Researcher CSIC, Spain
01/01/1993 - 31/12/1994	Postdoc scholarship PFPI Extranjero MEC, San Diego State University, USA
01/01/1992 - 31/12/1992	Postdoc scholarship Caja Ahorros Mediterráneo, Univ. Murcia, Spain
05/04/1990 - 04/10/1990	Project researcher, Univ. Murcia, Spain
01/01/1986 - 31/12/1989	Predoc scholarship PFPI MEC, Univ. Murcia, Spain

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
Lic. Ciencias Biológicas	Univ. de Murcia, Spain	1985
PhD. Ciencias Biológicas	Univ. de Murcia, Spain	1991

## Part B. CV SUMMARY (Blue Carbon related)

Mis aportaciones más relevantes en el ámbito del “Carbono azul” están relacionadas con la ecología de plántulas de angiospermas marinas y la restauración de praderas de angiospermas marinas, en particular de la especie mediterránea *Posidonia oceanica*. Estas investigaciones me han permitido determinar condiciones ambientales favorables para el plantado de *P. oceanica*, identificar metodologías exitosas de plantado y estudiar la recuperación del funcionamiento del ecosistema en la zona plantada (como hábitat para otros organismos y zona de guardería para peces juveniles). La restauración puede contribuir a la recuperación de la capacidad de secuestro de carbono de las praderas y al mantenimiento o protección de los sumideros de carbono que algunas praderas forman. Recientemente he iniciado una línea de trabajo sobre la identificación y priorización de praderas a restaurar en función de múltiples criterios: biológicos, ecológicos, socio-ecológicos y de gestión ambiental e incluyendo el cambio climático.

The general goal of my scientific career is to understand the functioning of marine macrophytes, the communities they form, and their response to natural and anthropogenic disturbances. Seagrasses have been the main focus group of my research that has been done in temperate (Mediterranean, California), subtropical (Canary Islands), tropical (SE Asia, Gulf of Mexico) and sub-antarctic (Strait of Magellan) environments. Several topics of macrophyte biology and ecology have been addressed: growth, reproduction, productivity, apical dominance, clonal integration, competition, herbivory, effects of light, temperature, nutrient availability, redox status of sediment, hydrodynamism, burial, siltation, eutrophication, aquaculture. During the last years I have assessed environmental factors and ecological processes that affect the survivorship and vegetative development of seagrass seedlings, mostly the Mediterranean species *Posidonia oceanica*. *P. oceanica* losses are mainly driven by local disturbances which are amenable to sustainable management. Ecological restoration of disturbed *P. oceanica* meadows is an option to consider given the low recovery from disturbance capacity of this species. I have acquired experience in the collection and culture of seeds and rhizome fragments, and the planting of *P. oceanica* at sea. A main goal in the coming years is to evaluate the recovery of the structure and functioning of restored (*P. oceanica*) seagrass meadows. Seagrass restoration can contribute to the recovery the carbon sequestration capacity of the ecosystem and the maintenance or protection of the extant carbon sinks that some seagrass meadows produce such as *P. oceanica*. An additional objective is the design of methodologies for the identification and prioritization of seagrass restoration sites.

## Part C. RELEVANT MERITS

### Publications

#### SCI papers

Castejón-Silvo I, Terrados J (2021) Poor success of seagrass *Posidonia oceanica* transplanting in a meadow disturbed by power line burial. Marine Environmental Research, 170,105406.

Pereda-Briones L, Terrados J, Agulles M, Tomas F (2020) Influence of biotic and abiotic factors of seagrass *Posidonia oceanica* recruitment: Identifying suitable microsites. Marine Environmental Research 162, 105076.

Pereda-Briones L, Terrados J, Tomas F (2019) Negative effects of warming on seagrass seedlings are not exacerbated by invasive algae. Marine Pollution Bulletin 141: 36–45

Pereda-Briones L, Infantes E, Orfila A, Tomas F, Terrados J (2018) Dispersal of seagrass propagules: interaction between hydrodynamics and substratum type. Marine Ecology Progress Series 593: 47-59.

Pereda-Briones L, Tomas F, Terrados J (2018) Field transplantation of seagrass (*Posidonia oceanica*) seedlings: Effects of invasive algae and nutrients. *Marine Pollution Bulletin*, 134:160-165.

Hernán G, Ortega MJ, Gándara AM, Castejón I, Terrados J, Tomas F (2017). Future warmer seas: increased stress and susceptibility to grazing in seedlings of a marine habitat-forming species. *Global Change Biology* 2017; 1-14.

Hernán G, Ramajo L, Basso L, Delgado A, Terrados J, Duarte CM, Tomas F (2016) Seagrass (*Posidonia oceanica*) seedlings in a high-CO<sub>2</sub> world: from physiology to herbivory. *Scientific Reports*, 6:38017.

Terrados J, Marín A, Celrá D (2013) Use of *Posidonia oceanica* (L.) Delile seedlings from beach-cast fruits for seagrass planting. *Botanica Marina*, 56: 185-195

Domínguez M, Celrá D, Muñoz-Vera A, Infantes E, Martínez-Baños P, Marín A, Terrados J (2012) Experimental evaluation of the restoration capacity of a fish-farm impacted area with *Posidonia oceanica* (L.) Delile seedlings. *Restoration Ecology*, 20: 180-187

Infantes E, Orfila A, Bouma TJ, Simarro G, Terrados J (2011) *Posidonia oceanica* and *Cymodocea nodosa* seedling tolerance to wave exposure. *Limnology and Oceanography*, 56: 2223-2232

Domínguez M, Infantes E, Terrados J (2010) Seed maturity of the Mediterranean seagrass *Cymodocea nodosa*. *Vie et Milieu – Life and Environment*, 60: 307-312

Gacia E, Kennedy H, Duarte CM, Terrados J, Marbà N, Papadimitriou S, Fortes M (2005) Light-dependence of the metabolic balance of a highly productive Philippine seagrass community. *Journal of Experimental Marine Biology and Ecology*, 316: 55-67

Barrón C, Marbà N, Terrados J, Kennedy H, Duarte CM (2004) Community metabolism and carbon budget along a gradient of seagrass (*Cymodocea nodosa*) colonization. *Limnology and Oceanography*, 49:1642-1651

### Books and book chapters

Terrados J, Otero M, Bacci T, Didderen K, La Porta B, Teunis M, Bouma T (2021) Restauración de sistemas de carbono azul, pp110-129, en UICN (2021) Manual para la creación de proyectos de carbono azul en Europa y en el Mediterráneo, Otero M (Ed.), 144 págs.

Castejón-Silvo I, Álvarez B, Terrados J (2018) Guía Práctica. El plantado de *Posidonia oceanica*. Red Eléctrica de España, Madrid, 64 págs. Depósito legal: M-35941-2018

<https://www.ree.es/es/publicaciones/sostenibilidad-y-medio-ambiente/sostenibilidad/guia-plantacion-posidonia>.

### **Research projects**

Climate Change and Future Marine Ecosystem Services and Biodiversity, FutureMARES. European Commission, H2020 programme. University of Hamburg (coordinator) and 32 more partners, including CSIC. From 1/9/202 to 31/8/2024. 139.836 € (IMEDEA budget within CSIC budget). PI: Marta Coll. Role: Researcher.

Design and production of a degradable seed nursery prototype to facilitate the restoration of *Posidonia oceanica* meadows affected by mechanical disturbances. Govern de les Illes Balears, Conselleria d'Innovació, Recerca i Turisme, Direcció General d'Innovació i Recerca, Acció Especial d'R+D. PI: Inés Castejón-Silvo, IMEDEA (CSIC-UIB). 2016. 13.142 €. Role: Researcher.

CTM2011-27377 Restauración de praderas de *Posidonia oceanica* con plántulas; Influencia de la luz, nutrientes y herbivoría. Plan Nacional de I+D+I 2008-11. PI: Jorge Terrados Muñoz, IMEDEA (CSIC-UIB). 2012-14. 48.000 €.

116/SGTB/2007/1.3 Técnicas de recuperación y expansión de las praderas de *Posidonia oceanica* mediante reimplante con semillas . Plan Nacional de I+D+I 2004-07. PI: Arnaldo Marín Atucha, Univ. Murcia. 2007-09. 102.641 €. Role: Researcher.

### **Contracts, technological or transfer merits**

Restauración de *Posidonia oceanica* en Fornells, Menorca. Ports de les Illes Balears & Fundación Universitat Empresa de les Illes Balears. PI: Jorge Terrados Muñoz, IMEDEA (CSIC-UIB). 2022-2025. 50.626 €

Restauración de pradera de *Posidonia oceanica*. Red Eléctrica de España, S.A.U. PI: Jorge Terrados Muñoz, IMEDEA (CSIC-UIB). 2017-2025. 454.004 €.

Uso de semillas y fragmentos de *Posidonia oceanica* para su recuperación en zonas afectadas por la actividad de REE. Red Eléctrica de España, S.A.U. PI: Jorge Terrados Muñoz, IMEDEA (CSIC-UIB). 2013-2016. 206.000 €.