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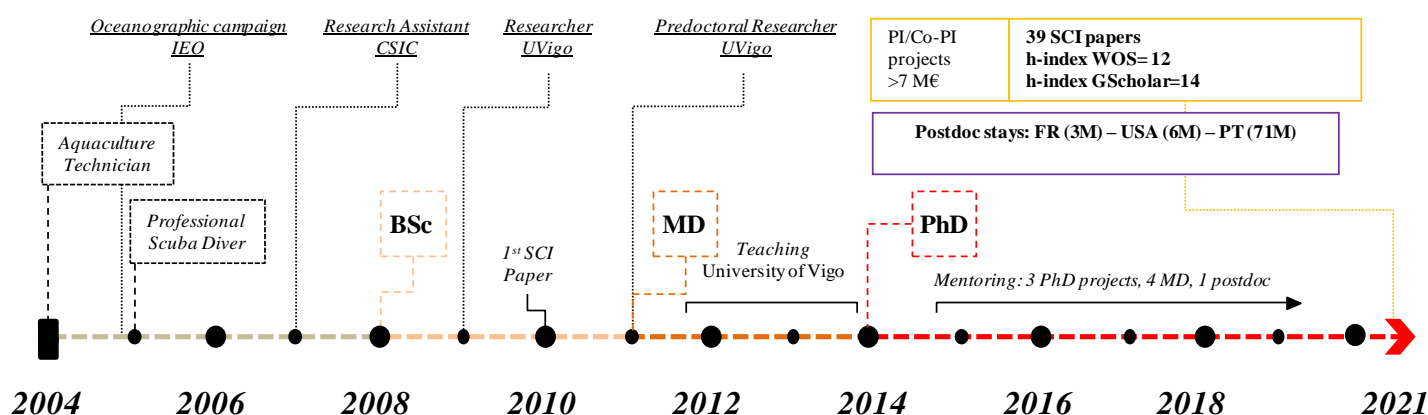
Marine Coastal Ecologist

39 JCR articles

(h-index WOS= 12; h-index GScholar=14)

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[Personal Website](#); [@ignaciogestoso](#)



SUMMARY: I finished my PhD Thesis in September 2014 by University of Vigo and at present I am a Postdoctoral Fellow at MARE (PT). My scientific career is focused on the study of the ecological processes in coastal systems with special interest on the evaluation of anthropogenic impacts on marine biodiversity, particularly studying the ecological consequences for the marine benthic communities. I have a well-established theoretical knowledge in marine ecology, especially in biological invasions, climate change effects and biotic interactions. My skills include field sampling (intertidal and subtidal habitats), experimental design (field and mesocosm), data management and statistical analysis (multivariate techniques and mixed models). During the last 5 years (2016-2021) I published 28 SCI papers and participated in >15 scientific international conferences. My scientific approach follows a strategy from patterns to processes, starting from observational studies to later test explanatory hypotheses through field and mesocosm experiments. I contributed to relevant ecological questions in marine science, namely: to improve the understanding of the marine invasion processes (see e.g. Gestoso et al. 2014 MEPS-IF: 2.292; 2017 MPB-IF: 3.146); impact of climate change (see e.g. Gestoso et al. 2016 JEMBE-IF: 1.937); and marine plastic pollution (see e.g. Gestoso et al. 2019 STOTEN-IF:5.589). Very remarkable is my mentoring, co-supervisor in 3 PhD Theses, 4 MD students and 1 Postdoc. I am also member of MarineGEO and mentor in GAME project (Geomar). Moreover, I have been involved as PI/CoPI in the preparation and development of 8 grant proposals now approved from Euro and Nat. Funds (e.g. MIMAR-2M€). I disseminate my work to the society through a variety of outreach activities, e.g. global significance new type of plastic pollution (Gestoso et al. 2019 STOTEN) with a high scientific (357 Altmetric Attention Score) and social media impact (e.g. CNN, Wash. Post, NatGeo, RTP).

Academic Background

- 2014 **PhD in Marine Sciences**. Climate Change & Invasion Ecology at the University of Vigo, Spain. Advisors: Dr. Celia Olabarria and Dr. Francisco Arenas. Graduated *magna cum laude*. Department of Ecology and Animal Biology, Faculty of Marine Sciences, University of Vigo.
- 2010 **Master's degree in Marine Biology by the University of Vigo: "Biology of organisms and ecosystems"**. Final master dissertation: "Preference of habitat by marine invertebrates". Advisors: Dr. Celia Olabarria Uzquiano and Dr. Jesus Souza Troncoso. Department of Ecology and Animal Biology, Faculty of Marine Sciences University of Vigo.
- 2008 **Degree in Marine Biology**. Faculty of Biology. University of Santiago de Compostela. South Campus. Santiago de Compostela.

Additional Training

- 2018 Course "**Data Exploration, Regression, GLM & GAM with introduction to R**" (40 hours) Highland Statistics Ltd. Instructors: Dr. Alain Zuur, Dr. Elena Ieno. Oceanic Observatory of Madeira, Madeira Island, Portugal.
- 2018 Course "**Gentle Introduction to GIS**" (14 hours). Natural GIS, Lda. Oceanic Observatory of Madeira, Funchal, Madeira Island, Portugal.
- 2017 Course "**Laboratory Animal Sciences Course - Aquatic Organisms**" (40 hours). Marine Biology Station of Funchal, Madeira Island, Portugal.
- 2014 Course "**Introductory statistics and programming with R for biological sciences – Module I: Fundamental statistical techniques**" (20 hours). Interdisciplinary Centre of Marine and Environmental Research (CIIMAR). Porto, Portugal.
- 2011 Course "**Basic biostatistics with R**" (16 hours). University of Santiago de Compostela. Santiago de Compostela, Spain.
- 2011 Workshop on "**Mapping Seabed Habitats: GIS Data Management**" (40 hours). Universidade de Aveiro. Aveiro, Portugal.
- 2010 Course "**Introduction to the analysis of biological data**" (40 hours). Organized by the Spanish Society of Phycology. Universidad Rey Juan Carlos. Madrid. Content: Descriptive statistics, graphic design, correlation and regression ANOVA, multivariate ANOVA-MANOVA, assumptions of analysis of variance, introduction to the Randomization Test and nonparametric approaches, introduction to GLMS-Linear Models Generalized hierarchical designs for field monitoring, analysis of multivariate ordination.
- 2009 Course "**Data processing Microsoft Excel**" (20 hours). University of Vigo. Campus Lagoas - Marcosende. Vigo.
- 2008 Course "**Introduction to Underwater Photography**" (20 hours). Instructor: underwater photographer Jose Luis Gonzalez. University of Vigo. Campus Lagoas - Marcosende. Vigo.
- 2007 "**Basic Sailing Master**" Directorate General of Merchant Marine. Madrid, Spain.
- 2006 Course "**Rescue Diver. PADI**" Cies Islands Dive Center. Vigo, Spain.
- 2005 (08/01/2005 to 09/15/2005) **Professional diver**. Professional Diving School of Galicia. Course and Title of Professional Diving (150 hours). IGaFA (Galician Institute for Aquaculture Training). Illa de Arousa. Pontevedra, Spain.
- 2005 Course "**Advanced Open Water Diver**" SSI Scuba Schools International.
- 2005 "**First Aid Course for Professional Divers Level I and II.**" IGaFA (Galician Institute for Aquaculture Training). Illa de Arousa.
- 2004 Course "**Maintenance and Management of Sharks**"(20 hours). ZooAquarium of Madrid.
- 2004 Course "**Professional Aquarist - Level II (40 hours) Technical design and**

Technology" Organized by the Department of Fisheries and Maritime Affairs. Galician Institute for Aquaculture Training. Illa de Arousa.

- 2002-2004 **"Aquaculture Technician"** by the IgaFA (Galician Institute for Aquaculture Training). Illa de Arousa.
- 2003 **"Assistance to the VI Forum of Marine Resources Aquaculture in the Galician Rias"** Organized by the U.S.C. Illa da Toxa Hotel Balneario (Pontevedra).
- 2003 Course **"Professional Aquarist - Level I (65 hours) Business and Industrial Applications."** Organized by the Department of Fisheries and Maritime Affairs. Galician Institute for Aquaculture Training. Illa de Arousa.
- 2002 **"Competence course and title of Sailor"** (60 hours). Organized by the Department of Fisheries and Maritime Affairs. Galician Institute for Aquaculture Training. Illa de Arousa.
- 2000 Course **"Introduction to the Study of Elasmobranch Fishes"** (30 hours) Faculty of Sciences. Organized by the Department of Animal Anatomy, University of Vigo.
- 2000 Course **"FEDAS Diving: 1^aStar"** (40 hours). Puerto Almirante dive center. Cabo de Palos (Murcia).

Computers

- Office package (Excel, Word, Powerpoint, etc. - UVigo courses).
- Statistics (SPSS, STATISTICA, PRIMER, PERMANOVA, GMAV, R).
- Graphic Design (CorelDraw, SigmaPlot).
- Databases (Reference Manager, Mendeley Desktop).

Languages *

Spanish and Galician (mother tongue)

Portuguese: upper intermediate level spoken and written.

English: upper intermediate level spoken and written.

- 2020 English Course: Cambridge English Certificate. Instituto de Línguas, Funchal, Portugal.
- 2013 English Course: "LEVEL B1" (40 hours) Language Centre, University of Vigo.
- 2009 English Course "LEVEL A2" (45 hours). Linguatime English school. Sliema (Malta).
- 2005 English Course: "LEVEL A" (45 hours) Language Centre, University of Vigo.

French: basic spoken and written.

- 2008 "LEVEL A1.1 French Course" (45 hours). Institut Linguistique du Peyrou. Montpellier (France).

*Competences also supported by research stays: USA (6 months); PT (3 + 60 months); FR(3months)

Participation in R&D&I projects funded in competitive calls by public or private bodies

- Name of the project: Evaluación del impacto de microplásticos y contaminantes emergentes en las costas de la Macaronesia - IMPLAMAC. Head(s) researcher(s): Dr. João Canning-Clode & Dr. Ignacio Gestoso García. Funding institution or bodies: Fondo Europeo de Desarrollo Regional-FEDER. Start-End date: 2019 – 2022. Total budget: 1.578.261,53 € (budget polo: 99.029,18 €)
- Name of the project: Seguimiento, control y mitigación de proliferaciones de organismos marinos asociadas a perturbaciones humanas y cambio climático en la Región Macaronésica– MIMAR+. Head(s) researcher(s): Dr. João Canning-Clode & Dr. Ignacio Gestoso García. Funding institution or bodies: Fondo Europeo de Desarrollo Regional-FEDER. Start-End date: 2019 – 2022. Total budget: 2.008.758,36 € (budget polo: 123.393,95 €)

- Name of the project: Development of a new methodology for the study of bioinvasions on coastal communities: experimental test across insular and continental systems. Head(s) researcher(s): Dr. Ignacio Gestoso García. Funding institution or bodies: MARE Programme 2017 Start-End date: 2017 – 2018 Total budget: 5000€
- Name of the project: Bases para la planificación sostenible de áreas marinas de la Macaronesia – PLASMAR. Head(s) researcher(s): Dr. João Canning-Clode & Dr. Ignacio Gestoso García. Funding institution or bodies: Fondo Europeo de Desarrollo Regional-FEDER. Start-End date: 2017 – 2019. Total budget: 1.216.885,32 € (budget polo: 133.277,34 €)
- Name of the project: Seguimiento, control y mitigación de proliferaciones de organismos marinos asociadas a perturbaciones humanas y cambio climático en la Región Macaronésica – MIMAR. Head(s) researcher(s): Dr. João Canning-Clode & Dr. Ignacio Gestoso García. Funding institution or bodies: Fondo Europeo de Desarrollo Regional-FEDER. Start-End date: 2017 – 2019. Total budget: 2.218.308,03 € (budget polo: 143.170,15 €)
- Name of the project: Linking climate change and species invasion: effects on intertidal habitats. Institution: University of Vigo. Head(s) researcher(s): Dr. Celia Olabarria Uzquiano Funding institution or bodies: Spanish Government through the Ministry of Science and Innovation-FEDER. Start-End date: 2010 – 2013
- Name of the project: Getting liquid extracts of algae as a value added product for agriculture and cosmetics from Galician coastal resources. Institution: University of Vigo. Head(s) researcher(s): Dr. Celia Olabarria Uzquiano. Funding institution or bodies: Regional government Xunta de Galicia. Start-End date: 2010 – 2012
- Name of the project: Factors affecting the distribution of *Sargassum muticum* in Galicia. Institution: University of Vigo. Head(s) researcher(s): Dr. Jesús López Pérez. Funding institution or bodies: Regional government Xunta de Galicia. Start-End date: 2007 – 2010.
- Name of the project: Efectos del roturado sobre las características biosedimentarias y la producción marisquera. Institution: University of Vigo. City: Vigo, Galicia, Spain. Head(s) researcher(s): Dr. Mariano Lastra Valdor. Funding institution or bodies: Autonomic government Xunta de Galicia. Start-End date: 2004 – 2006

Communications conference

- Cacabelos E, Ramalhosa P, Canning-Clode J, Troncoso J, Olabarria C, Ferrario J, Delgado C, Dobretsov S, **Gestoso I** (2019) Monitoring marine exotic species in the Ria de Vigo. International Workshop BluePorts2019. Gijón, Spain. (*Oral Communication*)
- **Gestoso I** (2019). A Chronological Overview on the study of marine bioinvasions in Madeira Island. Congreso MIMAR: Cambio Global en la Región Macaronésica. Las Palmas, Canary Islands. (*Invited Speaker*)
- **Gestoso I** (2019). Contrasting effects of simulated marine heat waves on native versus non-indigenous species. Congreso MIMAR: Cambio Global en la Región Macaronésica. Las Palmas, Canary Islands. (*Invited Speaker*)
- Png-Gonzalez L, Ramalhosa P, Álvarez S, **Gestoso I**, Canning-Clode J, Nogueira N (2019) Assessment of fouling communities on offshore aquaculture structures in Madeira (eastern Atlantic). Aquaculture Europe 2019, Berlin, Germany, October 7-10, 2019.
- Álvarez S, **Gestoso I**, Herrera A, Riera L, Sambolino A, Canning-Clode J (2019) Estudo base acerca da caraterização de lixo marinho no arquipélago da Madeira. 2ª Conferência Portuguesa sobre Lixo Marinho, APLM, 19-20 setembro, Setúbal, PT (*Oral Communication*)
- **Gestoso I**, Ramalhosa P, Cacabelos E, Ferrario J, Castro N, Henriquez F, Monteiro J, Chainho P,

- Pham CK, Castro JJ and Canning-Clode J (2019). A new methodology for the study of biological invasions on coastal communities. XX Iberian Symposium on Marine Biology Studies (SIEBM XX), Braga, Portugal, 9 Sep - 12 Sep, 2019. doi: 10.3389/conf.fmars.2019.08.00137
- Castro N, Canning-Clode J, Ramalhosa P, Cacabelos E, Costa JV and **Gestoso I** (2019). Do Non-Indigenous Species (NIS) prevailing over native species with climate change effects? XX Iberian Symposium on Marine Biology Studies (SIEBM XX), Braga, Portugal, 9 Sep - 12 Sep, 2019. doi: 10.3389/conf.fmars.2019.08.00032 (*Oral Communication*)
 - Cacabelos E, Ramalhosa P, Canning-Clode J, Troncoso JS, Olabarria C, Delgado C, Dobretsov S and **Gestoso I** (2019). Biofilms shaping compositions of macrofouling assemblages: An initial barrier against NIS settlement? XX Iberian Symposium on Marine Biology Studies (SIEBM XX), Braga, Portugal, 9 Sep - 12 Sep, 2019. doi: 10.3389/conf.fmars.2019.08.00062 (*Oral Communication*)
 - Castro N, Ramalhosa P, Jesus J, Costa JL, **Gestoso I**, Canning-Clode J (2019). Historic marine traffic into Madeira (Funchal): temporal patterns evolution and Non-indigenous species (NIS) introductions. XX Iberian Symposium on Marine Biology Studies (SIEBM XX), Braga, Portugal, 9 Sep - 12 Sep, 2019.
 - **Gestoso, I.**, Davidson, I., Canning-Clode, J., Simkanin, C., Ruiz, G. (2018). The role of ecosystem engineer species in shaping the resistance of resident communities to marine invasion events. Xth International Conference on Marine Bioinvasions, ICMBX. Puerto Madryn, Argentina, 16-18 October, 2018. (*Oral Communication*)
 - Ferrario F, **Gestoso I**, Ramalhosa P, Cacabelos E, Canning-Clode J (2018) Disturbance and fouling communities: the role of nonindigenous species on artificial habitats and natural shores. Xth International Conference on Marine Bioinvasions, ICMBX. Puerto Madryn, Argentina, 16-18 October, 2018.
 - Canning-Clode J, **Gestoso I**, Ramalhosa P, Monteiro J, Lima MJ, Caldeira R (2018) Hitch-hikers on marine debris: understanding new arrivals in an offshore island. Xth International Conference on Marine Bioinvasions, ICMBX. Puerto Madryn, Argentina, 16-18 October, 2018. (*Oral Communication*)
 - **Gestoso, I.**, Ramalhosa, P., Riera, L., Canning-Clode, J. (2018) Biotic interactions during the invasion process in marine benthic communities: An island ecosystem case study. 103rd Annual Meeting of the Ecological Society of America, ESA. August 5-10, 2018. Ernest N. Morial Convention Center, New Orleans, Louisiana, USA.
 - Cacabelos, E., **Gestoso, I.**, Ramalhosa, P., Neto, A.I., Canning-Clode, J. (2018) Intertidal macroalgae across boulders and continuous rocky shores. Floramac2018, Madeira, 12to 15 September 2018, Portugal.
 - Cacabelos, E., **Gestoso, I.**, Ramalhosa, P., Canning-Clode, J. (2018) Population structure in intertidal molluscs across boulders and continuous rocky shores. Congresso Português de Malacologia 2018, Instituto Superior de Administração e Línguas, Funchal, Madeira 15-16 June 2018, Portugal.
 - Canning-Clode J, Ramalhosa P, Castro N, Schäfer S, Monteiro J, **Gestoso I**, Chainho P, Marques T, Haroun R, Fofonoff P, McCann L, Carlton JT, Ruiz G, Costa AC, Santos RS (2018). Marine invasions in the island ecosystem of Macaronesia: current status and the its interplay with climate change. 47th Annual Benthic Ecology Meeting. March 27-30, 2018. Corpus Christi, Texas, USA. Abstracts Book p. 19. (*Oral Communication*)
 - **Gestoso, I.**, Ramalhosa, P., Oliveira, P., Canning-Clode, J. 2016. Impact of rafting marine debris and non-indigenous species in the marine protected areas of the Madeira archipelago (NE Atlantic). BES Aquatic Macroecology Meeting, 30 Sep 2016, C. Darwin House, London, England.

- **Gestoso, I.**, Ramalhosa, P., Ferreira, L., Canning-Clode, J. 2016. Interactive effects of predation and facilitation during the settlement process of non-indigenous species. *Front. Mar. Sci.* Conference Abstract: XIX Iberian Symposium on Marine Biology Studies, Porto, Portugal. (**Oral Communication**)
- **Gestoso, I.**, Ramalhosa, P., Oliveira, P., Canning-Clode, J. 2016. Marine protected areas as biotic resistance hot-spots against non-indigenous species invasions. Conference program and abstracts of the 2nd International Conference on Island Evolution, Ecology and Conservation: Island Biology 2016, 18-22 July 2016, Angra do Heroísmo, Azores, Portugal. Arquipelago. Life and Marine Sciences. Supplement 9: page 124. (**Oral Communication**)
- **Gestoso, I.**, Ramalhosa, P., Oliveira, P., Canning-Clode, J. 2016. Impact of rafting marine debris and non-indigenous species in the marine protected areas of the Madeira archipelago (NE Atlantic). 9th International Conference on Marine Bioinvasions (ICMB-IX), Sydney, Australia. Abstract book, page 37.
- **Gestoso, I.**, Rossi, F. 2015. The cascading effect of sea anemones on epiphyte biomass in a eelgrass meadow. 44th Annual Benthic Ecology Meeting. March, 2015, Quebec City, Canada. (**Oral Communication**)
- Olabarria, C., Vaz-Pinto, F., **Gestoso, I.**, Arenas, F. 2012. Biological invasions in a global change scenario: some experimental approaches using *Sargassum muticum* and *Xenostrobus securis* as model species. III Workshop Red CYTED BIODIVMAR. November, 2012, University of Vigo, Vigo, Spain. (**Oral Communication**)
- Vaz-Pinto F., Olabarria C., **Gestoso I.**, Cacabelos I., Incera, M., Arenas, F. 2012. Role of functional diversity and climate change on the invasibility of macroalgae assemblages. "NEOBIOTA 2012" 7th European Conference on Biological Invasions. September, 2012, Pontevedra, Spain. (**Oral Communication**)
- Arenas, F., Olabarria, C., Viejo, R.,..., E., **Gestoso, I.**, Sobrino, C. 2011. Impact & feedbacks of invasion and climate change on algal assemblages: experimental approaches. Vth European Phycological Congress. September, 2011, Rhodes, Greece. (**Oral Communication**)
- **Gestoso I.**, Olabarria I., Peña Pérez M., & Arenas F. 2011 Pattern of distribution of invasive mussel *Xenostrobus securis* along an horizontal gradient in the Ria of Vigo (NW Spain). Seventh International Conference on Marine Bioinvasions (ICMB-VII). Aug 2011, Bcn, Spain.
- **Gestoso I.**, Olabarria I., Peña Pérez M., & Arenas F. 2011. Macrofauna associated with mussel aggregation: does invasive species make a difference?. Seventh International Conference on Marine Bioinvasions (ICMB-VII). August, 2011, Barcelona, Spain.
- Cacabelos E., Rubal M., Veiga P., Incera M., Vaz-Pinto F., **Gestoso I.**, Viejo R., Arenas F., & Olabarria C. 2011. Patterns of spatial variation in macroalgal assemblages of Iberian rockpools invaded by *Sargassum muticum*. Seventh International Conference on Marine Bioinvasions (ICMB-VII). August, 2011, Barcelona, Spain.
- Vaz-Pinto F., Arenas F., Olabarria C., Viejo R., Rubal M., Veiga P., Incera M., Cacabelos I., **Gestoso I.**, & Sobrino C. 2011. Response of macroalgae assemblages to an invasion and climate change scenario. Seventh International Conference on Marine Bioinvasions (ICMB-VII). August, 2011, Barcelona.
- Olabarria C., **Gestoso I.**, & Arenas F. 2011. A new mussel species in the Ria de Vigo (NW of Spain): mechanism of invasion. International workshop "Blooms and invasions of marine species". June, 2011, Sète, France. (**Oral Communication**)
- Arenas F., Olabarria C., Viejo R., Rubal M., Veiga P., Incera M., Vaz-Pinto F., Cacabelos E., **Gestoso I.**, Sobrino C., & Sousa Pinto I. 2010. Climate change and marine invasions: experimental insights from macroalgal assemblages. 12^o Encontro Nacional de Ecologia.

October, 2010, Porto, Portugal. (*Oral Communication*)

- Cacabelos E., Olabarria C., Incera M., **Gestoso I.**, & Troncoso, J.S. 2010. A comparison of epifaunal assemblages with native kelps and invasive species. XVI Simposio Ibérico de Estudios de Biología Marina. September, 2010, Alicante, Spain.
- Olabarria, C., Incera, M., Cacabelos, E., & **Gestoso, I.** 2010. Factors affecting invasión: experimental approach using the invasive alga *Sargassum muticum* as a model. XVI Simposio Ibérico de Estudios de Biología Marina. September, 2010, Alicante, Spain. (*Oral Communication*)
- **Gestoso, I.**, Olabarria, C., Cacabelos, E., Incera M., & Troncoso, J.S. Preference behaviour in hábitat selection of a marine amphipod. 45th European Marine Biology Symposium. August, 2010, Heriot- Watt University, Edinburgh, Scotland.
- Cacabelos E., Incera M., **Gestoso I.**, Troncoso, J.S., & Olabarria C. Role of urbanization on the spatio-temporal variability of marine macroalgal assemblages invaded by *Sargassum muticum*. 45th European Marine Biology Symposium. August, 2010, Heriot-Watt University, Edinburgh, Scotland.
- Incera M., Olabarria C., Cacabelos E., & **Gestoso I.** Experiment set-up to test the effect of herbivory and space availability on *Sargassum muticum* invasion. 45th European Marine Biology Symposium. August, 2010, Heriot-Watt University, Edinburgh, Scotland.
- **Gestoso, I.**, Olabarria, C., Cacabelos, E., & Troncoso, J.S. Spatio-temporal variability of epifaunal assemblages associated with native and invasive algae. World conference on biological invasions and ecosystem functioning. October, 2009, Porto, Portugal.
- Cacabelos E., Olabarria C., Incera M., Cesar J., **Gestoso I.**, & Troncoso, J.S. Role of the sea urchin *Paracentrotus lividus* in controlling the distribution of *Sargassum muticum* on northwestern Spain. World conference on biological invasions and ecosystem functioning. October, 2009, Porto, Portugal.

Publications (39 SCI papers and 1 Book chapter published; h-index WOS=12, GScholar=14)

- Ehlers SM, Ellrich JA, **Gestoso I** (2021). Plasticrusts derive from maritime ropes scouring across raspy rocks. *Marine Pollution Bulletin*, 172: 112841.
- Bernal-Ibáñez, A., **Gestoso, I.**, Wirtz, P., Kaufmann, M., Serrão, E.A., Canning-Clode, J., Cacabelos, E. (2021) The collapse of marine forests: drastic reduction in populations of the family Sargassaceae in Madeira Island (NE Atlantic). *Regional Environmental Change* 21: 71.
- Castro, N., Ramalhosa, P., Cacabelos, E., Costa, J.L., Canning-Clode, J., **Gestoso, I.** (2021) Winners and losers: prevalence of non-indigenous species under different simulated marine heatwaves and high propagule pressure in an oceanic island. *Marine Ecology Progress Series*, 668: 21–38.
- Roma J, Schertenleib K, Ramalhosa P, **Gestoso I**, Canning-Clode J, Lenz M (2021) Moderately elevated temperatures increase macroalgal food consumption in two sea urchin species from coastal waters of Madeira. *Journal of Experimental Marine Biology and Ecology*, 542–543: 151603
- A.E. Bates, R.B. Primack, **PAN-Environment Working Group**, C.M. Duarte. Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation*, 109175.
- Bernal, A., Cacabelos, E., Melo, R., **Gestoso, I.** (2021) The Role of Sea-Urchins in Marine Forests from Azores, Webbnesia and Cabo Verde: human pressures, climate-change effects and restoration opportunities. *Frontiers in Marine Science*, 8: 691.
- Ramalhosa, P., **Gestoso, I.**, Rocha, R. M., Lambert, G., Canning-Clode, J. (2021). Ascidian biodiversity in the shallow waters of the Madeira Archipelago: Fouling studies on artificial

substrates and new records. *Regional Studies in Marine Science*, 43:101672.

- Vilizzi, L., Copp, G. H., Hill, J. E., Adamovich, B., ...**Gestoso, I.**,... Semenchenko, V. (2021). A global-scale screening of non-native aquatic organisms to identify potentially invasive species under current and future climate conditions. *Science of The Total Environment*, 147868.
- Gizzi, F., Monteiro, J.G., Silva, R., Schäfer, S., Castro, N., Almeida, S., Chebaane, S., Bernal-Ibáñez, A., Henriques, F., **Gestoso, I.**, Canning-Clode, J. (2021) Disease outbreak in a keystone grazer population brings hope to the recovery of macroalgal forests in a barren dominated island. *Frontiers in Marine Science*, 8: 682.
- Parretti, P., Ros, M., **Gestoso, I.**, Ramalhosa, P., Costa, A.C., Canning-Clode, J. (2021) Assessing biotic interactions between a non-indigenous amphipod and its congener in a future climate change scenario. *Aquatic Invasions* 16:2
- Schäfer, S., Monteiro, J., Castro, N., Gizzi, F., Henriques, F., Ramalhosa, P., Parente, M.I., Rilov, G., **Gestoso, I.**, Canning-Clode, J. (2021) Lost and found: A new hope for the seagrass *Cymodocea nodosa* in the marine ecosystem of a subtropical Atlantic Island. *Regional Studies in Marine Science* 41:101575
- Castro, N., Ramalhosa, P., Jesus, J., Costa, J.L., **Gestoso, I.**, Canning-Clode, J. (2020) Exploring marine invasions connectivity in a NE Atlantic Island through the lens of historical maritime traffic patterns. *Regional Studies in Marine Science*, 37, 101333
- Álvarez, S., **Gestoso, I.**, Herrera, A., Riera, L., Canning-Clode, J. (2020) A Comprehensive First Baseline for Marine Litter Characterization in the Madeira Archipelago (NE Atlantic). *Water Air Soil Pollution*, 231, 182.
- Cacabelos, E., Ramalhosa, P., Canning-Clode, J., Troncoso, J.S., Olabarria, C., Delgado, C., Dobretsov, S., **Gestoso, I.** (2020) The Role of Biofilms Developed under Different Anthropogenic Pressure on Recruitment of Macro-Invertebrates. *International Journal of Molecular Sciences*, 21(6), 2030
- Herrera, A., Raymond, E., Martínez, I., Álvarez, S., Canning-Clode, J., **Gestoso, I.**, Pham, C.K., Ríos, N., Rodríguez, Y., Gómez, M. (2020) First evaluation of neustonic microplastics in the Macaronesian region, NE Atlantic. *Marine Pollution Bulletin* 153, 110999
- Ferrario, J., **Gestoso, I.**, Ramalhosa, P., Cacabelos, E., Duarte, B., Caçador, I., Canning-Clode, J. (2020) Marine fouling communities from artificial and natural habitats: comparison of resistance to chemical and physical disturbances. *Aquatic Invasions* 15
- Rossi, F., Viejo, R.M., Duarte, L., Vaz-Pinto, F., **Gestoso, I.**, Olabarria, C. (2019) Removal of an established invader can change gross primary production of native macroalgae and alter carbon flow in intertidal rock pools. *PLoS ONE* 14(12): e0217121.
- Cacabelos, E., **Gestoso, I.**, Ramalhosa, P., Riera, L., Neto, A., Canning-Clode, J. (2019) Intertidal assemblages across boulders and rocky platforms: a multi-scaled approach in a subtropical island. *Marine Biodiversity* 49(6), 2709-2723.
- **Gestoso, I.**, Cacabelos, E., Ramalhosa, P., Canning-Clode, J. (2019) Plasticrusts: a new potential threat in the Anthropocene's rocky shores. *Science of the Total Environment*, 687, 413-415.
- Ramalhosa, P., **Gestoso, I.**, Duarte, B., Caçador, I., Canning-Clode, J. (2019) Metal pollution affects both native and non-indigenous biofouling recruitment in a subtropical island system. *Marine Pollution Bulletin* 141: 373-386.
- Alves, F., Canning-Clode, J., Ribeiro, C., **Gestoso, I.**, Kaufmann, M. (2019) Local benthic assemblages in shallow rocky reefs find refuge in a marine protected area at Madeira Island. *Journal of Coastal Conservation* 23: 373-383.
- Riera, L., Ramalhosa, P., Canning-Clode, J., **Gestoso, I.** (2018) Variability in the settlement of non-indigenous species in benthic communities from an oceanic island. *Helgoland Marine*

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- **Gestoso, I.**, Ramalhosa, P., Canning-Clode, J. (2018) Biotic effects during the settlement process of non-indigenous species in marine benthic communities. *Aquatic Invasions* 13: 247-259.
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- Vaz-Pinto, F., Olabarria, C., **Gestoso, I.**, Cacabelos, E., Incera, M., Arenas, F. (2013) Functional diversity and climate change: effects on the invasibility of macroalgal assemblages. *Biological invasions*, 15: 1833-1846.
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- **Gestoso, I.**, Olabarria, C., Troncoso, J.S. (2012) Selection of habitat by a marine amphipod. *Marine Ecology*, 35: 103-110.
- **Gestoso, I.**, Olabarria, C., & Arenas, F. (2012) The invasive mussel *Xenostrobus securis* along the Galician coast (NW Spain): status of invasion. *Cahiers de Biologie Marine*, 53: 391-396.
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- Cacabelos, E., **Gestoso, I.** 2010. Preferencia de Hábitat y alimento en invertebrados marinos:

técnicas experimentales en laboratorio. In: Olabarria et al. Métodos y técnicas en investigación marina. *Editorial Tecnos (Grupo Anaya)*. Madrid.

- **Gestoso, I.**, Olabarria, C., Troncoso, J.S. 2010. Variability of epifaunal assemblages associated with native and invasive macroalgae. *Marine Freshwater Research*, 61: 724-731.

Outreach activities

- 2020 Scientific coordinator and organizer: Workshop mini-Grant MARE – Identification benthic fauna and flora from Portugal coasts: island versus continent environments (nº participants: 23)
- 2019-Present Reporting the results of scientific work through interviews in international (e.g. [CNN](#), [Washington Post](#), [Fox News](#), [National Geographic](#)), national (e.g. [Público](#), [SIC](#), [RTP](#)) and regional (e.g. [Diário de Notícias](#), RTP-Madeira) media.
- 2017-Present Public conference/talk (schools, educational events) “Sea of plastic: the impact of marine debris in the marine environment” Funchal, Madeira Island, Portugal. Organising institution: Oceanic Observatory of Madeira.
- 2016-Present Public events “Ciencia no Mercado”, Mercado dos Lavradores, Praça do Peixe, Funchal. Organising institution: Oceanic Observatory of Madeira.
- 2019 Public events “Macaronight 2019”. Market La Vie, Funchal. Organising institution: Oceanic Observatory of Madeira. (Total participants: 2000)
- 2017 Public activity “Ciência Viva no Verão em Rede 2017” Sampling of microplastics in sandy beaches. Organising institution: Oceanic Observatory of Madeira.
- 2016 “Workshop OOM 2016” Member of the organizing committee – 1st Workshop OOM
- 2016 Public conference “Anthropogenic impacts in marine protected areas (MPAs) of the Madeira archipelago: interactive effects of marine debris, pollution and invasive species”. Funchal, Madeira Island, Portugal. Organising institution: Madeira Nature Park.
- 2013 Public conference: “Biological invasions in our coasts: the macroalga from Japan (*Sargassum muticum*) and the mussel from New Zealand (*Limnoperna securis*)”. Type of event: Conference. City: Redondela, Galicia, Spain. Organising institution: Xunta de Galicia - Grupos de Accion Costeira. Type of institution: Associations and Groups

Mentoring and teaching experience

- 2021 **Co-mentor** to Svea Vollstedt and Abel Chamorro, **Global Approach by Modular Experiments (GAME project), GEOMAR**. Project title: The influence of artificial light at night on activity and feeding behavior of marine invertebrates. CSIC-IIM, Spain.
- 2020 **Co-mentor** to Ignacio Moreu and Jacob Houvener, **Global Approach by Modular Experiments (GAME project), GEOMAR**. Project title: Impact of plastic debris on mussel beds. CSIC-IIM, Spain.
- 2019-2023 **Doctoral co-advisor** of Alejandro Bernal. PhD Project title: Human impact on macroalgal forests of the Madeira Archipelago: status assessment, local and global threats and restoration opportunities. MARE – Marine and Environmental Sciences Centre, Faculty of Science of the University of Lisbon (FCUL).
- 2019-2023 **Doctoral co-advisor** of Anna Diem. PhD Project title: Marine protected areas of the Madeira Archipelago: Hub for the dispersal of introduced species or hot-spots of biotic resistance against biological invasions? MARE – Marine and Environmental Sciences Centre, Faculty of Science of the University of Lisbon (FCUL).
- 2018 **Co-mentor** to Brianna Santiago, **SERC Internship program Summer 2018** at Marine Invasions Lab. Project title: “Heterogeneity Effects on Benthic Recruitment in a Marina Environment”. Smithsonian Environmental Research Center, Edgewater, Maryland, USA.

- 2017-2020 **Doctoral co-advisor** of Nuno Castro. PhD Project title: Marine invasions in Madeira island: shipping, diversity patterns, connectivity and future perspectives in a changing world. MARE – Marine and Environmental Sciences Centre, Faculty of Science of the University of Lisbon (FCUL). TID: 101613075
- 2017 **Co-mentor** to Jasmine Ferrario, **Short Term Scientific Mission (STSM) - COST Action CA15121**: Advancing marine conservation in European and contiguous seas (MarCons) Working Group 3: Marine conservation and biological invasions. Marine non-indigenous species in “green harbours”: designing artificial substrates that reduce biological invasions MARE – Madeira, Quinta do Lorde Marina, Caniçal, Madeira Island, Portugal.
- 2017 **Mentor** to Léa Riera, **Master “Biology Ecology and Environment” Université de Montpellier**, Marine Bioresources in Tropical and Mediterranean Environment. Project title: Les especes invasives dans l’archipel de Madere: Recensement, surveillance des vecteurs d’introduction et experimentation en mesocosme. MARE – Marine and Environmental Sciences Centre, Quinta do Lorde Marina, Caniçal, Madeira Island, Portugal.
- 2017 **Co-mentor** to Katrin Schertenleib and Joana Roma, **Global Approach by Modular Experiments (GAME project), GEOMAR**. Project title: Thermotolerance in marine mesograzers. MARE – Marine and Environmental Sciences Centre, Quinta do Lorde Marina, Caniçal, Madeira Island, Portugal.
- 2013/2014 **Environmental Impact Assessment** (5 hours) in the degree in Biology at the University of Vigo.
- 2013 **Ecosystems Ecology** (43 hours) and **Conservation Ecology** (10 hours) in the degree in Biology at the University of Vigo.
- 2012 **Marine Ecology** (30 hours) in the degree in Marine Sciences at the University of Vigo.

Services

- 2020 – *Present* Member of the Research Network “**PAN-Environment**” headed by Dra. A. Bates (Memorial Univ), Dr. C. Duarte (RSRC/KAUST) and Dr. R. Primack (Boston Univ).
- 2019 – *Present* Member of **MarineGEO** Working Groups (Science Working Group, Partnerships Working Group, and Education and Outreach Working Group). Tennenbaum Marine Observatories Network Smithsonian Institution
- 2018 – *Present* Research Associate. Smithsonian Environmental Research Center (SERC). MD, USA.
- 2012 – *Present* **Reviewer** for scientific journals: Scientific Reports, Biofouling, STOTEN, Marine Environmental Research, PLoS ONE, Marine Biology, Marine and Freshwater Research, Biological Invasions, Marine Ecology Progress Series.
- 2016 – *Present* **Reviewer** for granting agencies: NSF- National Science Foundation; Poland National Science Centre – NCN.

Awards

- “**MARINE INOVA 2011**”, 3^o prize, for the project: “Viability of monkfish aquaculture”. Campus do Mar, Marine Instruments and Inova Consultores. Vigo.

Professional Experience

- 10/2015 – *Present* **PostDoctoral Fellow**. MARE- Marine and Environmental Sciences Centre. Canning Clode Marine Lab, Madeira Island, Portugal.

*In addition to my own postdoctoral project, I was also participating in the different projects and activities

of the research group where I am based ([Canning-Clode Marine Lab](#) at MARE-Madeira): monitoring surveys of the marinas of Madeira; monitoring surveys of ship hulls from ships arriving to Madeiran coast; subtidal surveys using scuba; assistance on mentoring students. Particularly involved in OOM's oceanographic campaigns: design and participation of the Coastal Habitat and Biotope Characterization of remote locations (with SCUBA) of the island.

- 4/2018 – 10/2018 (6 months) **Postdoctoral stay** in public institution, **Smithsonian Environmental Research Center (SERC)**. Edgewater, Maryland, United States.

*During the six months and integrated in the Marine Invasions Research Lab, a world leader in research on biological invasions led by Dr. Gregory Ruiz, the purpose of this stay was to develop an experiment to investigate the dynamics of Ecological Resistance in benthic marine communities, a major concept in biological invasion theory. I benefited from the mesocosm indoor/outdoor facilities and of SERC's extensive experience to achieve the objectives proposed. The results from this research mission at SERC were presented in the ICMB 2019 Puerto Madryn, Patagonia. The publication is in process and will potentially provide key knowledge to marine invasion ecology.

- 10/2012 – 12/2012 (3 months) **Postdoctoral stay** in public institution, **UMR 5119 (ECOSYM laboratory) at the University of Montpellier 2**. Montpellier, France.

*Working on the ecology of seagrasses under the supervision of Dr. Francesca Rossi. This lab is the French partner of the Zostera Experimental Network (ZEN), a global project especially focused on ecological research of the seagrass meadows. The principal aim of this network is to study the structure and functioning eelgrass (*Zostera marina*) ecosystems, and during my stay I had the opportunity to be actively involved in the activities of the research group and develop my own laboratory experiment focused on the evaluation of the trophic web interactions in the Zostera system. The study was presented in the BEM2015.

- 1/2012- 1/2014 **Research staff biologist-PhD Student (predoctoral contract)** in thesis project: "Invasion and climate change: mechanisms and impacts on coastal systems" directed by Dr. Celia Olabarria Uzquiano. EZ1 Research Group. Department of Ecology and Animal Biology, Faculty of Sciences. University of Vigo.

*The aim of my thesis project was to understand the distribution and mechanisms of invasion of the non-indigenous mussel *Xenostrobus securis* NW coast of Spain, as well as its impact on the associated fauna. In addition, I explored how a future climate change scenario may affect to this species. Overall, results showed that the establishment of *X. securis* clumps implies a change of biogenic habitat for benthic assemblages that causes a shift in abundance of dominant associated macrofaunal species. In addition, I concluded that a combination of favourably environmental conditions and a lower biotic resistance (lower predation pressure) could explain the actual distribution of *X. securis* in the NW coast of Spain.

- 5/2012 – 7/2012 (3 months) **PreDoctoral stay** in public institution, **CIIMAR - Interdisciplinary Centre of Marine and Environmental Research**. Porto, Portugal.

*During this stay I performed a mesocosm experiment, as part of my PhD research project. I explored the effects of temperature and CO₂ on native and invasive mussel species. I constructed artificially plates with native and invasive mussel aggregations to test the hypothesis that both mussel species would respond differently to changes in temperature and CO₂. Then, plates were exposed in experimental tanks to different temperatures and CO₂ concentrations. Response variables were biomass, growth, condition index, survivorship and calcification rate of mussels. Additionally, we measured NH₃ concentration, respiration rates and clearance rates as proxy for ecosystem function.

- 3/2011 – 9/2011 **Research staff biologist**, project: "Getting liquid extracts of algae as a value added product for agriculture and cosmetics from Galician coastal resources," directed by Dr. Celia Olabarria Uzquiano. EZ1 Research Group. Department of Ecology and Animal Biology, Faculty of Sciences. University of Vigo.

- 10/2009 - 10/2010 **Fellowship training at the Marine Science Station Toralla** (ECIMAT), University of Vigo. Toralla Island.
- 11/2008-10/2009 Research staff biologist for the development of "*Study of macroalgae and associated epifaunal invertebrate communities: species native vs. invasive species. Analysis of the structure and organization of epifaunal invertebrate communities associated with Sacchoriza polyschides, Bifurcaria bifurcata (native species) and Sargassum muticum (invasive species) in intertidal rocky shores*", within the project: "**Effects of the invasive alga Sargassum muticum on structure and composition of local communities of two intertidal ecosystems**", directed by Dr. Celia Olabarria Uzquiano. EZ1 Research Group. Department of Ecology and Animal Biology - Faculty of Sciences. University of Vigo.
- 08/18/2008-08/27/2008 **Aquaculture assistant** Insuñía SL – Chapela
- 12/2007 - 8 / 2008 **Collaboration Grant 2007/2008, Aquarium Finisterrae** (A Coruña).
 - *Participation in underwater surveys to study seahorses *Hippocampus guttulatus*:
 - Capture and marking individuals detected. Lifting from a boat and takes the necessary data for the study population (depth, visibility, temperature, ...).
 - Handling samples: marking horses, genetic sampling if the first sighting, wet weight.
- 8/2007 - 9/2007 Internship in **Department of Biology and Fish Larval Physiology of the Institute of Marine Research (CSIC), Vigo**. (185 hours).
 - *Work related to establishing and maintaining a stock of *Hippocampus guttulatus* in aquariums:
 - Maintenance of farming systems adult seahorses in aquariums of 450 liters.
 - Preparation and enrichment of *Artemia salina* diets and feeding the seahorses.
 - Diving for underwater observation and sampling wild seahorses in Vigo (Bouzas and Toralla) and Marin.
 - Auxiliar culture: phytoplankton culture (maintenance of strains of the species *Isochrysis galbana*, inoculation and cultivation in flasks and bags); culture *Artemia* (from hatching to adult size cyst fed phytoplankton and enriching commercial) rotifer culture (maintenance strains axenic and development in large volumes.)
- 3/2006 - 10/2006 **Aquarist in ZooAquarium in Madrid**.
 - *Carrying out all tasks related to the maintenance of facilities and aquarium species:
 - Diving with scuba equipment for maintenance and cleaning of exhibition aquaria.
 - Preparation and distribution of food for all species in the aquarium.
 - Installation and maintenance of filters, aquarium pumps and aquarium facilities.
 - Reception, housing and quarantine work of new species for the aquarium's collection.
 - Breeding and larval rearing various species of aquarium collection.
 - Guide tours the facilities at the aquarium.
- 11/2004 - 3/2006 **Specialist Technician in the Department of Ecology and Animal Biology**, Faculty of Sciences (EZ1 Research Group). University of Vigo.
 - *Collaboration in all tasks undertaken by the group EZ1:
 - Assessment of the Prestige oil spill impact on communities and species of commercial interest and ecological coastal areas (National: Urgent Action Prestige Natural Resources).
 - Study of the ecological changes caused by the cleaning of beaches (CICyT)
 - Responses of intertidal sedimentary ecosystems to oil spills and cleanup in the Atlantic Islands, Costa da Morte and Northern Spain (CIS - FEUGA)
 - Preparation of material for surveys conducted by the group in the intertidal sand from different parts of the Galician coast (Cies Sálvora, Ons, Louro, ...)
 - Participation in the sampling and data management.
 - Separation and identification of species in samples of fauna, mapping and temporal dynamics.
- 9/2004 - 10/2004 Campaign "**Porcupine 09/04**" Conducted by the **Spanish Institute of Oceanography**. Having remained on board as a scientist aboard the research vessel "**Vizconde de Eza**", from 5 September to 7 October.

*Active participation in the research work done during the campaign, soft bottoms in the Porcupine Bank area:

- 3/2004 - 6/2004 "**FCT - ZooAquarium Madrid**" (440 hours). Practices as an aquarist. Hippocampus farming experience.

Other interesting information

- **Driving licence** A1 and B1 (motorbike and car driver's licence).
- 2001 - 2003 Member of the Association of Diving **ISUV (Underwater Research at the University of Vigo)**. Organization of outreach activities (e.g. lectures, screenings) related to the marine environment.