

## 1. PERSONAL INFORMATION

Paco BUSTAMANTE

French and Spanish, born in Cherbourg (France) on February 9<sup>th</sup>, 1970

Business Address: Littoral, Environnement et Sociétés (LIENSs)  
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## 2. EDUCATION

University of Caen, Caen, France:

- Bachelor in Biochemistry and applied Biology (June 1993)

University of Aix-Marseille, Marseille, France:

- Master of Sciences in Environmental Sciences (June 1994)

University of La Rochelle, La Rochelle, France:

- Ph.D. in Biological Sciences (First Class Honours, December 1998)
- Habilitation in Biological Sciences (December 2005)

## 3. PROFESSIONAL EXPERIENCE

1995-1998: PhD student at the University of La Rochelle

1999: Post-doctoral fellow at the International Atomic Energy Agency, Monaco

1999-2000: Research Assistant at the University of La Rochelle

2000-2005: Assistant Professor (Maître de Conférences) at the University of La Rochelle

2005-2007: Delegated researcher at the CNRS (Centre National de la Recherche Scientifique)

Since 2007: Full professor at the University of La Rochelle (2<sup>nd</sup> Class 2007-2010, 1<sup>st</sup> Cl. 2010-2014, Exceptional Cl. since 2014)

Since 2017: Senior Member of the IUF (Institut Universitaire de France)

## 4. SCIENTIFIC ACTIVITIES

### 4.1. Major fields of training and research experience

Marine ecotoxicology and ecology: Heavy metals, radionuclides and organic pollutants bioaccumulation and detoxification in marine biota; Tissue and subcellular distribution, characterisation of biological effects; transfer and fluxes of contaminants (using both stable and radioactive isotopes); determination and validation of bioindicators and biomarkers; trophic web functioning; role of top predators.

**4.2. Scientific publications. H-index Scopus: 50 with > 8700 citations and >310 papers** in international journals with peer-review committee (for details see <http://lienss.univ-larochelle.fr/Bustamante-Paco-publications> or <http://orcid.org/0000-0003-3877-9390>).

**4.3. Researches abroad.** 18 researches stay (from one week up to 4 months) in 7 foreign laboratories and marine stations.

**4.4. Scientific communications.** Over 240 communications in more than 70 international congresses and workshops.

### 4.5. Academic and scientific responsibilities

- Supervisor of 22 PhD theses and 24 Master Theses in ecotoxicology and ecology
- Supervisor and/or mentor of 7 post-doctoral positions in ecotoxicology and ecology
- Member of more than 110 PhD and “Habilitation” Examining Boards
- Expert for the EC for the evaluation of Integrated Projects and Networks of Excellence in the call Food quality and safety » (N° FP6-2004-FOOD-3A)
- Expert for the EC for the evaluation of Marie Curie Fellowships (Internal, Out-going and In-coming fellowships and European and International Reintegration Grants) in the FP6 and FP7
- Vice-Chairman for the EC for the evaluation of Marie Curie Fellowships (Internal, Out-going and In-coming fellowships) in the FP7
- Expert for IFS (Sweden), FCT (Portugal), FNRS (Belgium), ANR (France), BES (UK), IAEA (UN), NSERC (Canada), IAEA (UN), INACH (Chili), .....

**4.6. Referee for more than 80 international scientific journals**

### 4.7. Researches under contracts

- EC EVK3 – 2000 – 00027 BIO CET: “BIOaccumulation of persistent organic pollutants in small CETacean species in European waters: transport pathways and impact on reproduction”. 2000-2003 (FP5)

- EC QLRT-2001-00962 CEPHSTOCK: “Cephalopod stocks in European waters: review, analysis, assessment and sustainable management”. 2001-2005 (FP5)
- New Caledonia PNEC-Project (French National Programme on Coastal Environment) (2000-2007)
- French National Program Seine-Aval “Environment Analysis & Management” Project "Metal bioaccumulation (Ag, Cd, Hg, Pb) in the king scallop *Pecten maximus* from the Bay of Seine and Risk Assessment for Human consumers". 2004-2007
- IAEA Coordinated Research Project “Applications of Radiotracer and Radio-assay Technologies to Seafood Safety Risk Analysis”. 2007-2011
- EC KBBE-2009-1-2-14 FACTS: “Sustainable use of seas and oceans: importance of foraging fish in the ecosystem”. 2010-2012 (FP6)
- ANR CESA POLARTOP: “Contaminants in POLAR TOP predators: levels and effects of persistent organic pollutants and heavy metals on stress physiology and fitness in Antarctic seabirds”. 2011-2014.
- ERAC-CT-2006-025989 REPRODUCE: “Understanding REcruitment PROcesses Using Coupled biophysical models of the pelagic Ecosystem”. 2010-2012 (FP5)
- INTERREG program ORQUE : “Observatoire de recherche sur la qualité de l’environnement du Grand Sud Ouest européen”. 2012-2014 (INTERREG SUDOE)
- PCIG13-GA-2013-631203 ARCTOX: “Sea-Ice shrinking and increasing human activities in the arctic: what risks for the avian biodiversity?” 2014-2017 (FP7)
- PI for the ANR ILETOP: “Impacts of Legacy and Emerging pollutants on arctic avian TOP predators”. 2016-2020
- ANR ISO2MET: “ISotopes of Metal Elements for Tracing marine METabolism”. 2019-2022
- ANR APPROve: “Integrated Approach to Propose PRoteomics for biOMonitoring: accumulation, fate and multi-markers”. 2019-2022
- PI for the Nouvelle Aquitaine project EXPO « Exposition des prédateurs de la zone intertidale aux contaminants ». 2018-2023

## 5. SOME RELEVANT PUBLICATIONS

- **Bustamante P**, Caurant F, Fowler SW, Miramand P (1998) Cephalopods as a vector for the transfer of cadmium to top marine predators in the North east Atlantic Ocean. *Science of the Total Environment* 220: 71-80. Cited 242 times in Scopus
- **Bustamante P**, Cosson RP, Gallien I, Caurant F, Miramand P (2002) Cadmium detoxification processes in the digestive gland of cephalopods in relation to accumulated cadmium concentrations. *Marine Environmental Research*, 53: 227-241. Cited 131 times in Scopus
- **Bustamante P**, Teyssié J-L, Fowler SW, Cotret O, Danis B, Miramand P, Warnau M (2002) Biokinetics of zinc and cadmium accumulation and depuration at different stages in the life cycle of the cuttlefish *Sepia officinalis*. *Marine Ecology Progress Series* 231:167-177. Cited 94 times in Scopus
- **Bustamante P**, Teyssié J-L, Fowler SW, Danis B, Cotret O, Miramand P, Warnau M (2004) Uptake, transfer and distribution of silver and cobalt in the tissues of the common cuttlefish *Sepia officinalis* at different stages of its life cycle. *Marine Ecology Progress Series*, 269: 185-195. Cited 60 times in Scopus
- **Bustamante P**, Lahaye V, Durnez C, Churlaud C, Caurant F (2006) Total and organic Hg concentrations in cephalopods from the North East Atlantic waters: influence of geographical origin and feeding ecology. *Science of the Total Environment*, 368: 585-596. Cited 151 times in Scopus
- Lacoue-Labarthe T, Martin S, Oberhänsli F, Teyssié JL, Markich S, Ross J, **Bustamante P** (2009) Effects of increased pCO<sub>2</sub> and temperature on trace element (Ag, Cd and Zn) bioaccumulation in the eggs of the common cuttlefish, *Sepia officinalis*. *Biogeosciences*, 6: 2561-2573. Cited 77 times in Scopus
- Carravieri A, Cherel Y, Blévin P, Brault-Favrou M, Chastel O, **Bustamante P** (2014) Mercury exposure in a large subantarctic avian community. *Environmental Pollution*, 190: 51-57. Cited 57 times in Scopus
- Carravieri A, **Bustamante P**, Tartu S, Meillère A, Labadie P, Budzinski H, Weimerskirch H, Chastel O, Cherel Y (2014) Wandering albatross documents latitudinal variations in contaminant bioavailability in the Southern Ocean. *Environmental Science and Technology*, 48(24): 14746-14755. Cited 58 times in Scopus
- Fort J, Robertson GJ, Grémillet D, Traisnel G, Phillips RA, **Bustamante P** (2014) Spatial ecotoxicology: migratory Arctic seabirds are contaminated by mercury while overwintering in the Northwest Atlantic. *Environmental Science and Technology*, 48(19): 11560–11567. Cited 65 times in Scopus
- **Bustamante P**, Carravieri A, Goutte A, Barbraud C, Delord K, Chastel O, Weimerskirch H, Cherel Y (2016) High feather mercury concentrations in the wandering albatross are related to sex, breeding status and trophic ecology with no demographic consequences. *Environmental Research*, 140: 1-10. Cited 33 times in Scopus
- Eagles-Smith CA, Silbergeld EK, Basu N, **Bustamante P**, Diaz-Barriga F, Hopkins WA, Kidd KA, Nyland JF (2018) Modulators to mercury risk to wildlife and humans in the context of rapid global change. *Ambio*, 47(2): 170–197. Cited 166 times in Scopus