### **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) UMRi 7266 CNRS- Université de La Rochelle 2 rue Olympe de Gouges 17000 La Rochelle, France Phone: (+33) 546 507 625; Fax: (+33) 546 458 264 E-mail: pbustama@univ-lr.fr

### **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)

## 4. SCIENTIFIC ACTIVITIES

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

<u>Marine ecotoxicology and ecology</u>: 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. <u>H-index Scopus: 29 with > 2900 citations and >160 papers</u> in international journals with peer-review committee (for details see http://lienss.univ-larochelle.fr/Bustamante-Paco-publications).

**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 160 communications in more than 40 international congresses and workshops.

### 4.5. Academic and scientific responsibilities

- Supervisor of 12 PhD theses and 22 Master Theses in ecotoxicology and ecology
- Supervisor and/or mentor of 6 post-doctoral positions in ecotoxicology and ecology
- Member of more than 70 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 Incoming fellowships) in the FP7.

- Expert for IFS (Sweden), FCT (Portugal), FNRS (Belgium), ANR (France), BES (UK), IAEA (UN), NSERC (Canada), IAEA (UN).

### 4.6. Referee for more than 70 international scientific journals

#### 4.7. Researches under contracts

- EC EVK3 2000 00027 BIOCET: "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 SUDOE ORQUE : "Observatoire de recherche sur la qualité de l'environnement du Grand Sud Ouest européen". 2012-2014.
- PCIG13-GA-2013-631203 ARCTOX: "Sea-Ice shrinking and increasing human activities in the arctic: what risks for the avian biodiversity?". 2014-2017 (**FP7**).

### 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 152 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 85 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 62 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 42 times in Scopus*
- **Bustamante P**, Morales CF, Mikkelsen B, Dam M, Caurant F (2004) Trace element bioaccumulation in grey seals *Halichoerus grypus* from the Faroe Islands. *Marine Ecology Progress Series* 267:291-301. *Cited 24 times in Scopus*
- Bustamante P, Miramand P (2004) Interspecific and geographical variations of trace element concentrations in Pectinidae from European waters. Chemosphere 57: 1355-1362. *Cited 33 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 80 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 36 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*, 190C: 51-57. *Cited 9 times in Scopus*
- Carravieri A, **Bustamante P**, Tartu S, Meillère A, Labadie P, Budzinski H, Weimerskirch H, Chastel O, Cherel Y (2014) The wandering albatross documents latitudinal variations in contaminant bioavailability in the Southern Ocean. *Environmental Science and Technology*, 48(24): 14746-14755. *Cited 8 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 12 times in Scopus*
- **Bustamante P**, Carravieri A, Goutte A, Barbraud C, Delord K, Chastel O, Weimerskirsch 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*, 140A: 1-10. *Cited 1 time in Scopus*