

CURRICULUM VITAE

Irene Martins (BSc, MSc, PhD)

IDENTIFICATION

Full Name: Irene Isabel da Cruz Martins

Date of Birth: 09/06/1969

Nationality: Portuguese

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HIGHER EDUCATION

1996-2000 PhD. in Biology/Ecology, University of Coimbra (Portugal)

1993-1995 MSc. in Ecology, Faculty of Sciences and Technology, University of Coimbra (Portugal)

1988-1992 Graduation in Biology, University of Coimbra (Portugal)

MAIN AREAS OF COMPETENCE

- Ecological modelling of marine organisms and ecosystems
- Food web models of marine systems
- Long-term effects of different stressors in marine populations

CURRENT SITUATION

Assistant Researcher at CIIMAR Interdisciplinary Centre of Marine and Environmental Research of the University of Porto, Matosinhos, Portugal

PROFESSIONAL EXPERIENCE

2015-2016 Postdoctoral researcher at MARE- Marine and Environmental Sciences Centre, Faculty of Sciences and Technology, University of Coimbra, Portugal

August 2013-September 2014 Lecturer in Marine Ecosystem Modelling at the School of Ocean Sciences, Bangor University (UK)

April 2008-March 2013 Assistant Researcher at IMAR- Institute of Marine Research, Department of Life Sciences, University of Coimbra (Portugal)

December 2004-March 2008 Post-doc researcher at IMAR- Dep. Zoology, University of Coimbra, IMAR- Dep. of Oceanography and Fisheries, University of the Azores (Portugal) and IFREMER- Centre de Brest, Département Etude des Ecosystèmes Profonds (France)

2001-2003 Post-doc researcher at IMAR- Dep. Zoology, University of Coimbra, IMAR- Centre of Ecological Modelling, New University of Lisbon (Portugal), University of Southern Denmark, Department of Biology, Odense, Institute of Environmental Chemistry of the Royal Danish School of Pharmacy, University of Copenhagen (Denmark)

1999-2000 Researcher at the Limnological Department, Lund University, Lund (Sweden)

SCIENTIFIC ACHIEVEMENTS

Scientific publications (ISI) Citations in ResearchGate: 894

Papers

- 1- M. Martínez-Harro, P. Acevedo, **I. Martins**, J.P. Costa, M. Taggart, J.C. Marques, R. Ribeiro (**in press**). Assessing estuarine quality: A cost-effective in situ assay with amphipods. *Environmental Pollution*, Volume 212, May 2016, Pages 382-391
- 2- R. Gaspar, L. Marques, L. Pinto, A. Baeta, L. Pereira, **I. Martins**, J.C. Marques, J. M. Neto (**2017**). Origin here, impact there - The need of integrated management for river basins and coastal areas. *Ecological Indicators* 72, 794-802.
- 3- Cristiano V. M. Araújo, Matilde Moreira-SantosA, Joana Patrício, **Irene Martins**, Ignacio Moreno-Garrido, Julián Blasco, João C. Marques, Rui Ribeiro (**2015**). Feeding niche preference of the mudsnail *Peringia ulvae*. *Marine and Freshwater Research* 66(7) 573-581. DOI: 10.1071/mf14021. **Number of citations: 0**
- 4- De los Santos C., Neuparth T., Torres T., **Martins I.**, Cunha I., Sheahan D., McGowan T., Santos M.M. (2015). Ecological modelling and toxicity data coupled to assess population recovery of marine amphipod *Gammarus locusta*: application to disturbance by chronic exposure to aniline. *Aquatic Toxicology* 163: 60-70. DOI: 10.1016/j.aquatox.2015.03.019. Number of citations: 0
- 5- Allan T. Souza, Ester Dias, João C. Marques, C. Antunes, **Irene Martins** (**2015**). Population structure, production and feeding habit of the sand goby *Pomatoschistus minutus*(Actinopterygii: Gobiidae) in the Minho estuary (NW Iberian Peninsula). *Environmental Biology of Fishes*, 98: 287-300. DOI: 10.1007/s10641-014-0259-2. **Number of citations: 0**
- 6- T. Couto, **I. Martins**, B. Duarte, I. Caçador, J.C. Marques (**2014**). Modelling the effects of global temperature increase on the growth of salt-marsh plants. *Applied Ecology and Environmental Research* 12(3): 753-764. DOI: 10.15666/aeer/1203_753764. **Number of citations: 0**
- 7- Neuparth, T, Martins, C, Santos, CBDL, Costa, MH, **Martins, I**, Costa, PM, Santos, MM. (2014). Hypocholesterolaemic pharmaceutical simvastatin disrupts reproduction and population growth of the amphipod *Gammarus locusta* at the ng/L range. *Aquatic Toxicology* 155: 337-347. DOI: 10.1016/j.aquatox.2014.07.009. Number of citations: 2
- 8- Nuno Leite, Alexandra Guerra, João C. Marques, **Irene Martins** (**2014**). Incomplete resilience of a temperate estuary shown by the variation of population dynamics and productivity of *Echinogammarus marinus*. *Ecological Indicators* 36, 324-333. DOI: 10.1016/j.ecolind.2013.08.001. **Number of citations: 0**

- 9- **Irene Martins**, Nuno Leite, Emanuel Constantino (2014). Consumption and feeding preference of *Echinogammarus marinus* on different algae: *Fucus vesiculosus* versus *Ulva intestinalis*. *Journal of Sea Research* 85, 443-446. DOI: 10.1016/j.seares.2013.07.017. **Number of citations: 2**
- 10- Alexandra Guerra, Nuno Leite, Alex T. Ford, João C. Marques, **Irene Martins** (2014). Predicting the variation of amphipod populations from southernmost limits of distribution under global warming scenarios: Can sex-ratio make a difference? *Science of the Total Environment* 466-467, 1022-1029. DOI: 10.1016/j.scitotenv.2013.07.102. Number of citations: 1
- 11- Allan T. Souza, Ester Dias, Joana Campos, João C. Marques, **Irene Martins** (2014). Structure, growth and production of a remarkably abundant population of the common goby *Pomatoschistus microps* (Actinopterygii: Gobiidae) in Minho estuary, NW Iberian Peninsula. *Environmental Biology of Fishes* 97: 701-715. DOI: 10.1007/s10641-013-0172-0. **Number of citations: 1**
- 12- Allan T. Souza, Ester Dias, Ana Nogueira, Joana Campos, João C. Marques, **Irene Martins** (2013). Population ecology and habitat preferences of juvenile flounder *Platichthys flesus* (Actinopterygii: Pleuronectidae) in a temperate estuary. *Journal of Sea Research* 79, 60-69. DOI: 10.1016/j.seares.2013.01.005. **Number of citations: 3**
- 13- **Irene Martins**, Maria L. Arosa, Ricardo S. Ceia, Sandra Parejo, Jaime A. Ramos, Christian Damgaard. (2012) The winter energetics of the Azores bullfinch and the implications for the restoration of its native laurel forest habitat. *Ecological Modelling*, 231: 80-86. DOI: 10.1016/j.ecolmodel.2012.01.015. Number of citations: 1
- 14- Alex T Ford, **Irene Martins**, Alison M. Dunn (2012). Insights into sperm-fertilization relationships in the Arthropoda with ecological significance modeled in an amphipod. *Invertebrate Reproduction and Development*, 56 (1): 50-56. DOI: 10.1080/07924259.2011.606176. **Number of citations: 3**
- 15- Souza AT, Ilarri MI, Campos J., Marques JC, **Martins I.** (2011) Differences in the neighborhood: Structural variations in the carapace of shore crabs *Carcinus maenas* (Decapoda: Portunidae). *Estuarine, Coastal and Shelf Science*, 95: 424-430. DOI: 10.1016/j.ecss.2011.06.021. **Number of citations: 3**
- 16- J.C. Pereira, I. Abrantes, **I. Martins**, J. Barata, P. Frias, I. Pereira (2011). Ecological and morphological features of *Amylodinium ocellatum* occurrences in cultivated gilthead seabream *Sparus aurata* L.: A case study. *Aquaculture* 310(3-4): 289-297. DOI: 10.1016/j.aquaculture.2010.11.011. **Number of citations: 7**
- 17- **Irene Martins**, Alex T. Ford, Teresa F. Fernandes (2009). Intersexuality incidence, sex ratio fluctuations and intersex reproductive output as factors affecting the temporal variation of intersexed populations of the marine amphipod *Echinogammarus marinus*. *Marine Environmental Research* 68: 163-169. DOI: 10.1016/j.marenvres.2009.06.007. Number of citations: 5
- 18- **Irene Martins**, Ana Colaço, Paul R. Dando, Inês Martins, Daniel Desbruyères, Pierre-Marie Sarradin, João Carlos Marques, Ricardo Serrão-Santos (2008). Size-dependent variations on the nutritional pathway of *Bathymodiolus azoricus* demonstrated by a C-flux model. *Ecological Modelling* 217: 59-71. DOI:10.1016/j.ecolmodel.2008.05.008. **Number of citations: 24**

- 19- **Irene Martins**, A. Marcotegui, J.C. Marques (2008). Impacts of macroalgal spores on the dynamics of adult macroalgae in a eutrophic estuary. High *versus* low hydrodynamic seasons and long-term simulations for global warming scenarios. *Marine Pollution Bulletin*, 56: 984-998. DOI:10.1016/j.marpolbul.2008.01.025. **Number of citations: 1**
- 20- **Irene Martins**, R.J. Lopes, A.I. Lillebø, J.M. Neto, M.A. Pardal, J.G. Ferreira, J.C. Marques (2007). Significant variations in the productivity of green macroalgae in a mesotidal estuary: Implications to the nutrient loading of the system and the adjacent coastal area. *Marine Pollution Bulletin* 54: 678-690. DOI:10.1016/j.marpolbul.2007.01.023. Number of citations: 9
- 21- Alex T. Ford, **Irene Martins**, Teresa F. Fernandes (2007). Population level effects of intersexuality in the marine environment. *Science of the Total Environment* 374: 102-111. DOI:10.1016/j.scitotenv.2006.12.046. **Number of citations: 15**
- 22- A.I. Sousa, **I. Martins**, J.C. Marques, A.I. Lillebø, M.R. Flindt, M.A. Pardal (2007). Influence of salinity, nutrients and light on the germination and growth of *Enteromorpha* sp. spores. *Journal of Experimental Biology and Ecology* 341: 142-150. DOI: 10.1016/j.jembe.2006.09.020. **Number of citations: 22**
- 23- **I. Martins**, J.M. Neto, M.G. Fontes, J.C. Marques, M.A. Pardal (2005). Seasonal variation in short-term survival of *Zostera noltii* transplants in a declining meadow in Portugal. *Aquatic Botany* 82/2: 132-142. DOI: 10.1016/j.aquabot.2005.03.006. **Number of citations: 14**
- 24- A. I. Lillebø, J. M. Neto, **I. Martins**, T. Verdelhos, S. Leston, P. G. Cardoso, S. M. Ferreira, J. C. Marques & M. A. Pardal (2005). Management of a shallow temperate estuary to control eutrophication: the effect of hydrodynamics on the system nutrient loading. *Estuarine Coastal and Shelf Science* 65/4: 697-707. DOI: 10.1016/j.ecss.2005.07.009. **Number of citations: 77**
- 25- **Martins I.**, Pereira J.C., Ramos J.A., Jørgensen S.E. (2004). Modelling the effects of different fish prey species on the growth of Roseate Tern chicks. *Ecological Modelling* 177/1-2: 95-106. DOI:10.1016/j.ecolmodel.2004.02.002. **Number of citations: 4**
- 26- Cruz S., Marques J.C., Gamito S., **Martins I.** (2003). Autecology of the isopod, *Cyathura carinata* (Krøyer, 1847) in the Ria Formosa (Algarve, Portugal). *Crustaceana* 76 (7): 781-802. DOI: 10.1163/15685400360730589. **Number of citations: 0**
- 27- Bastviken S.K., Eriksson P.G., **Martins I.**, Neto J.M., Leonardson L., Tonderski K. (2003). Wetlands and aquatic processes: Potential nitrification and denitrification on different surfaces in a constructed treatment wetland. *Journal of Environmental Quality* 32: 2414-2420. DOI: 10.2134/jeq2003.2414. **Number of citations: 42**
- 28- **Martins I.**, Marques J.C. (2002) A model for the growth of opportunistic macroalgae (*Enteromorpha* sp.) in tidal estuaries. *Estuarine, Coastal and Shelf Science* 55 (2): 247-257. DOI: 10.1006/ecss.2001.0900. **Number of citations: 20**
- 29- **Martins I.**, Maranhão P., Marques J.C. (2002) Modelling the effects of salinity variation on *Echinogammarus marinus* Leach (Amphipoda, Gammaridae) density and biomass in the Mondego Estuary (Western Portugal). *Ecological Modelling* 152: 247-260. DOI: 10.1016/s0304-3800(02)00012-1. **Number of citations: 10**

- 30- Martins I.,** Pardal M.A., Lillebø A.I., Flindt M.R., Marques J.C. (2001). Hydrodynamics as a major factor controlling the occurrence of green macroalgae blooms in an eutrophic estuary: A case study. *Estuarine, Coastal and Shelf Science* 52: 165-177. DOI: 10.1006/ecss.2000.0708
Number of citations: 109
- 31-** Flindt M.R., Pardal M.A., Lillebø A.I., **Martins I.,** Marques J.C. (1999). Nutrient cycling and plant dynamics in estuaries: A brief review, *Acta Oecologica* 20 (4): 237-248. DOI: 10.1016/s1146-609x(99)00142-3. **Number of citations: 81**
- 32- Martins I.,** Oliveira J.M., Flindt M.R., Marques J.C. (1999). The effect of salinity on the growth rate of the macroalgae *Enteromorpha intestinalis* (Chlorophyta) in the Mondego Estuary (west Portugal). *Acta Oecologica* 20 (4): 259-265. DOI: 10.1016/s1146-609x(99)00140-x. **Number of citations: 50**
- 33- Martins I.,** Marques J.C., Jørgensen S.E., Nielsen S.N. (1997). Modelling the effects of green macroalgae blooms on the population dynamics of *Cyathura carinata* (Crustacea: Isopoda) in the Mondego estuary (Portugal). *Ecological Modelling*, 102: 33-53. DOI: 10.1016/S0304-3800(97)00098-7. **Number of citations: 15**
- 34-** Marques J.C., **Martins I.,** Teles-Ferreira C., Cruz S. (1994). Population dynamics, life history and production of *Cyathura carinata* (Krøyer) (*Isopoda: Anthuridae*) in the Mondego estuary, Portugal. *Journal of Crustacean Biology*, 14 (2): 258-272. DOI: 10.2307/1548906. **Number of citations: 40**

Book chapters

- 35-** N. Egerton, Nathalie Niquil, **Irene Martins.** History of Ecology (in press). Encyclopedia of Ecology, B. Fath (editor). 2nd Edition. ELSEVIER
- 36- I. Martins & J. C. Marques (2010).** Estuary Ecosystem Models. Chapter 3. In Jørgensen S.E.(editor) Handbook of Models Applied in Ecosystem and Environmental Management. CRC Press
- 37-** Flindt M.R., M.A. Pardal, A.I. Lillebø, **I. Martins,** J.M. Oliveira (2002). Nutrient dynamics in the intertidal pools of the Mondego estuary. I - Nutrients sources, sediment profiles, mineralisation and adsorption dynamics. In Pardal M. A., Marques J. C. & Graça M. A. S. (eds) *Aquatic ecology of the Mondego river basin. Global importance of local experience.* Chapter 3.2: 243-256, Imprensa da Universidade de Coimbra, Coimbra.
- 38-** Lillebø A.I., M.R. Flindt, M.A. Pardal, **I. Martins,** J.M. Neto, J.C. Marques (2002). Nutrient dynamics in the intertidal pools of the Mondego estuary. II – Seasonal efflux of PO₄-P and NH₄-N in bare bottom and vegetated pools. In Pardal M. A., Marques J. C. & Graça M. A. S. (eds) *Aquatic ecology of the Mondego river basin. Global importance of local experience.* Chapter 3.3: 257-272, Imprensa da Universidade de Coimbra, Coimbra.
- 39- Martins I.,** M.R. Flindt, M.A. Pardal, A.I. Lillebø, J.M. Oliveira, J.C. Marques (2002). Nutrient dynamics in the intertidal pools of the Mondego estuary. III- The importance of nutrient effluxes to macroalgal growth (*Enteromorpha* sp.). In Pardal M. A., Marques J. C. & Graça M. A. S. (eds)

Aquatic ecology of the Mondego river basin. Global importance of local experience. Chapter 3.4: 273-286, Imprensa da Universidade de Coimbra, Coimbra.

- 40- Lillebø A.I., M.A. Pardal, M.R. Flindt, J.M. Neto, F. Macedo, **I. Martins**, J.C. Marques (2002). Nutrient dynamics in the intertidal pools of the Mondego estuary. IV – Possible contribution to dissolved inorganic phosphorus loading. In Pardal M. A., Marques J. C. & Graça M. A. S. (eds) *Aquatic ecology of the Mondego river basin. Global importance of local experience.* Chapter 3.5: 287-300, Imprensa da Universidade de Coimbra, Coimbra.
- 41- **Martins I.**, M.A. Pardal, I. Metelo, J.M. Neto, J.M. Oliveira, J.C. Marques (2002). *Enteromorpha* spp. (Ulvaes: Chlorophyta) growth in the south arm of the Mondego estuary: field growth rates with and without macrofaunal grazer effects. In Pardal M. A., Marques J. C. & Graça M. A. S. (eds) *Aquatic ecology of the Mondego river basin. Global importance of local experience.* Chapter 3.6: 301-312, Imprensa da Universidade de Coimbra, Coimbra.
- 42- Pardal M.A., J.C. Marques, S. Ferreira, **I. Martins**, A.I. Lillebø (2002). Life cycle, biology and production of an estuarine Isopod (*Cyathura carinata*). In Pardal M. A., Marques J. C. & Graça M. A. S. (eds) *Aquatic ecology of the Mondego river basin. Global importance of local experience.* Chapter 4.7: 417-434, Imprensa da Universidade de Coimbra, Coimbra.

Conference proceedings

Martins I., Teixeira Z, Gonçalves A, Bessa A, Verissimo H, Vinagre P and Marques JC (2016). Evidence for the long-term contribution of upstream agricultural practices and land use on the biodiversity and function of an estuary and adjacent coastal areas. Front. Mar. Sci. Conference Abstract: IMMR | International Meeting on Marine Research 2016. doi: 10.3389/conf.FMARS.2016.04.00103

Souza AT, **Martins I.**, Gonçalves JF and Ozorio R (2015). Predictive model of food intake of the Seabass *Dicentrarchus labrax* in closed aquaculture systems. Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology. doi: 10.3389/conf.FMARS.2015.03.00216

Martins I., Marques J.C., Jørgensen S.E., Nielsen S.N. (1994). *Cyathura carinata* (Crustacea: Isopoda), *Enteromorpha* spp. (Ulvaes: Chlorophyta) and organic matter: top-bottom or bottom-top control? The answer by an ecological model. In Modelling of Coastal and Estuarine Processes. Eds. F. Seabra Santos & A. Temperville. *Proceedings of the Seminaire Franco Portugais de Modélisation en Hydraulique Maritime.* Coimbra, Portugal: 187-193.

Theses:

- Martins, Irene I.C., 2000, Green macroalgae and seagrasses in a shallow eutrophic estuary (The Mondego Estuary, Portugal): dynamics, controlling factors and possible evolutionary scenarios. Ph.D thesis. University of Coimbra, Portugal.
- Martins, Irene I.C. 1995. Modelling the effects of opportunistic green macroalgae (*Enteromorpha* spp.) on the population dynamics of *Cyathura carinata* (Krøyer) (Isopoda: Anthuridae). MSc. thesis University of Coimbra, Portugal.

Participation in Research Projects

As Principal Investigator

- 1- *INPACTAR- Long-term effects of intersexuality and other impacts on populations of Echinogammarus marinus*. PTDC/MAR/111537/2009. Partners: CIIMAR, University of Porto, Portugal. Funding: 168.287,00 €. **2010-2014**
- 2- *Consequences of intersexuality in populations of marine crustaceans*. CRUP & British Council Partners: IMAR- Centro Interdisciplinar de Coimbra, Universidade de Coimbra, Portugal e School of Life Sciences, Napier University, Edinburgh, UK. Funding: 3,000 €. **2006-2007**

As Team member

- 3- *INNOVMAR-Innovation and Sustainability in the Management and Exploitation of Marine Resources-Research Line ECOSERVICES - Assessing the environmental quality, vulnerability and risks for the sustainable management of NW coast natural resources and ecosystem services*. NORTE-01-0145-FEDER-000035. Northern Regional Operational Programme (NORTE2020), through the European Regional Development Fund (ERDF). 01-10-2015-30-09-2018. Coordinator: Lúcia Guilhermino
- 4- *MODELFISH – Predictive model of food intake as a tool for environmental control and aquatic production*. Coordinator: Rodrigo Ozório (CIIMAR, ICBAS-University of Porto) **2014-2015**
- 5- *LTER- Long term vaRiation of ECOLOGICAL sTatus as a response to naturaL and human induced changes. implications for management and restoration - 3M_RECITAL*. Coordinator: J.C. Marques (IMAR-CMA). **2011-2014**
- 6- *Pest- Strategic Project - UI 284 - 2011-2012*. Coordinator: J.C. Marques (IMAR-CMA). **2011-2012**
- 7- *SIGNAL – Effects of pollution on estuarine zooplankton-zooplanktivorous fish ecological interactions in relation to climate changes*. Coordinator: Lúcia Guilhermino, CIIMAR, University of Porto. **2010-2013**
- 8- *EXTREMIS – Effects of extreme freshwater input fluctuations on the ecological status assessment in estuarine ecosystem. The benthic perspectives. (III/36/2008)*. Coordinator: Joana Mateus Patrício, IMAR-CMA. **2008-2010**
- 9- *CHEMECO- Colonization processes in chemosynthetic ecosystems- EuroDEEP- Proposal EURODEEP/0001/2007*. **2007-2010**
- 10- *Managing Effects of Global Climate on Estuarine Biodiversity and Productivity*. Coordinator: João Coimbra (CIIMAR). Partners: CIIMAR, Bergen University, NIOZ e IMAR. **2007-2010**
- 11- *EFICAS- Effects of natural stress generated by freshwater discharges in the benthic invertebrate estuarine communities and its influence on the assessment of the benthic ecological status*. Coordinator: João Carlos Marques. Partners: IMAR, University of Coimbra, Oceanography Institute, University of Lisbon. **2005-2008**

- 12- *DYNAMOD- Dynamic model of stress induced changes on benthic communities*. Coordenador: João Carlos Marques. Partners: IMAR, University of Coimbra, Department of Biology; University of Aveiro, Portugal. **2002-2004**
- 13- *Environmental management scenarios for water quality and ecosystem preservation of the Mondego estuary* Coordenador: João Carlos Marques. Partners: IMAR, University of Coimbra, IMAR – MARETEC, Technical University of Lisbon, IMAR, New University of Lisbon. **2002-2004**
- 14- *Environmental quality aims: Intercalibration of OSPAR with the Water Framework Directive*. Coordenador: João Carlos Marques. **2002-2004**
- 15- *WET/European programme TMR*. Partners: IMAR, Royal Danish School of Pharmacy (University of Copenhagen), Freshwater Biological Laboratory (University of Copenhagen), Department of Limnology (University of Lund), Department of Environmental Studies (University of Utrecht), Botanical Institute (University of Kiel), Ecosystem Research Center (University of Kiel), Dipartimento di Chimica Industriale (University of Pádua). Coordenador: Professor Doutor Klaus Dierssen (Ecosystem Research Center, University of Kiel). **1997-2000**
- 16- *Intertidal and subtidal characterization of the benthic communities from rocky substrates at the Berlengas island (Natural reserve)*. Coordinators: Miguel Pardal and João Carlos Marques (FCTUC). **1997**
- 17- *Marine Universal Structural Model (MUST)*. Partners: IMAR, Institute of Environmental Chemistry of the Royal Danish School of Pharmacy, University of Copenhagen (Denmark), Istituto di Chimica Industriale, Università di Padova (Italy). Coordenador: Professor Doutor Sven Erik Jørgensen (Royal Danish School of Pharmacy, University of Copenhagen). **1993-1995**
- 18- *Preliminary Integrated Study of the Mondego Estuary*. Partners: FCTUC, National Laboratory of Civil Engineering, Oregon Graduate Center (USA) and Mechanical Institute of Grenoble (France). Coordenador: Professor Doutor Fernando Seabra Santos (FCTUC). **1991-1992**
- 19- *Interdisciplinary approach of Mondego estuarine system*. Faculty of Sciences and Technology, University of Coimbra (FCTUC). Coordenador: Professor Dr João Carlos Marques (FCTUC). **1990-1992**

Supervision and co-supervision of academic works

PhD theses

- 1- Rui Miguel Martins Gaspar. Degradation and recovery trajectories of macroalgae populations along water quality changes. University of Coimbra. (2016) **Co-supervisor**.
- 2- Amrit Dencer-Brown. Assessment and predictions of multi-stressor effects on the function of coastal ecosystems. School of Ocean Sciences, Bangor University, UK. **Co-supervisor**
- 3- Thiago César Silveira. Habitat Suitability Models for Siluriforms Fish species in the Lake Guaíba, Southern Brazil. PUCRS, Brazil. Visiting student at the School of Ocean Sciences, Bangor University, UK. **Supervisor at Bangor University**

- 4- Thais Alves. Pattern of habitat distribution of the main Characiformes species from Guaiba Lake (Rio Grande do Sul, Brazil) as a function of environmental variables, 2014. PUCRS, Brazil. Visiting student at the School of Ocean Sciences, Bangor University, UK. **Supervisor at Bangor University**
- 5- Thiago Drumond Teixeira Correia Couto. Carbon balance and flows in young vs. mature salt marshes under different temperature and light scenarios, 2014. University of Coimbra (Portugal). **Co-supervisor**
- 6- Allan T. Souza. Abundance, structure and distributional patterns of core secondary producers in a temperate estuary: Driving factors and climate change scenario simulations, 2013. Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto (Portugal). **Co-supervisor**

Master theses

- 7- Lukas Widmer. Using ecological niche factor analysis (ENFA) to predict habitat suitability for the Eurasian otter (*Lutra lutra*) in Alsace (France) and the evaluation of its habitat preferences in a populated area. School of Ocean Sciences, Bangor University, UK, 2014. **Supervisor**
- 8- DeAnna Mae Massey. Whistle variations within the bottlenose dolphin population of Cardigan Bay, Wales. School of Ocean Sciences, Bangor University, UK, 2014. **Supervisor**
- 9- Anna Stevens. A photo-ID study of the Risso's dolphin (*Grampus griseus*) in Welsh coastal waters and the use of Maxent modelling to examine the environmental determinants of spatial and temporal distribution in the Irish Sea. School of Ocean Sciences, Bangor University, UK, 2014. **Supervisor**
- 10- Nuno Leite. Comparing the population dynamics and productivity of *Echinogammarus marinus* populations from the Mondego estuary in the 80's, 90's and 2009-2010. Discrimination of biotic and abiotic key-factors. Department of Life Sciences, FCTUC, University of Coimbra, 2010. **Co-supervisor**
- 11- Alexandra Guerra. Population dynamic models of different *Echinogammarus marinus* populations from the Mondego estuary. Impacts of intersexuality on the variation of natural populations. Department of Life Sciences, FCTUC, University of Coimbra, 2010. **Co-supervisor**
- 12- Aranzazu Marcotegui Fernández-Valmayor. Impacts of macroalgal spores on the dynamics of adult macroalgae in the Mondego Estuary (SW European coast). 2007. Department of Life Sciences, FCTUC, University of Coimbra, 2010. **Co-supervisor**
- 13- Ana Isabel Francisco Sousa. Influence of salinity, light and nutrients on *Enteromorpha* sp. spores. 2005. Department of Life Sciences, FCTUC, University of Coimbra, 2010. **Co-supervisor**
- 14- José Manuel da Costa Pereira. Influence of climatic factors and fish abundance on the populations of *Sterna dougalli* and *Sterna hirundo*. 2002. Department of Life Sciences, FCTUC, University of Coimbra, 2010. **Co-supervisor**

3rd year dissertations (Bangor University, UK):

- 15- Anna Taylor. Long term variation of populations: do natural populations tend to chaos? 2014. School of Ocean Sciences, Bangor University, UK. **Supervisor**

- 16- Charlotte Angove. Effect of climate change on carbon sequestration in temperate salt marsh plants. 2014. School of Ocean Sciences, Bangor University, UK. **Supervisor**
- 17- Dimuthu Jayakody. Effects of marine mammal recreational activities on marine mammal populations. 2014. School of Ocean Sciences, Bangor University, UK. **Supervisor**
- 18- Sally Latham. Spatial and Temporal Variations in Foraging Strategies of Breeding Cory's Shearwater (*Calonectris diomedea*) across the North East Atlantic. 2014. School of Ocean Sciences, Bangor University, UK. **Supervisor**
- 19- Samantha Trewin. How do deep-sea hydrothermal food webs sustain and organize? 2014. School of Ocean Sciences, Bangor University, UK. **Supervisor**

Degree students

- 20- J. M. Oliveira. 1998. Effects of salinity variation on the growth rate of *Enteromorpha intestinalis*. Dep. of Zoology, University of Coimbra, Portugal
- 21- J. M. Neto. 1996. Field growth rates of *Enteromorpha intestinalis* with and without grazing effects. Dep. of Zoology, University of Coimbra, Portugal
- 22- I. Metelo. 1996. Field growth rates of *Enteromorpha intestinalis* with and without grazing effects. Dep. of Zoology, University of Coimbra, Portugal

Transfer of knowledge

Spin-offs

- 2015: Founding member of MARMODEL - Environmental Consulting and Services | Maritime Ecotourism
- 2005-2008: Founding member of ECOMOD – Estudos, Consultoria e Modelação Ambiental, Lda.

Invited talks and voluntary outreach actions for society

- 1- 2015: Seminars and awareness actions within the theme *Pollution by Plastic* at primary (**2**) and high schools (**1**) from Coimbra area (Portugal)
- 2- 2014: Presenting and promoting the School of Ocean Sciences, Bangor University (UK) at the Menai Bridge Sea Food Festival, August 2014, Menai Bridge, NW (UK).
- 3- 2006: Fontes hidrotermais. *Oásis de vida no mar profundo* (in Portuguese) at the University of Coimbra within the cultural week of the University of Coimbra (Semana do Mar) (**1**) and at the Escola Superior Educação de Coimbra (**1**)
- 4- Since 2005: Sporadic (**1 per year**) outreach actions at primary and high schools from Coimbra area (Portugal) within the theme: *Estuaries: Between the River and the Sea*

Scientific invited talks

- 1- *Variations on the energy flow along estuarine food webs*, 11/04/2014, CEM, Universidade do Paraná, Pontal do Paraná, Brazil.

- 2- *Using ecological models in marine ecology: a powerful tool to understand and manage marine and coastal areas. Cases on coastal eutrophication and system-based models*, 25/10/2013, SOS Biology seminar, School of Ocean Sciences, Bangor University, UK.
- 3- *Using ecological models to understand remote ecosystems*, 27/09/2013, Taster lecture at School of Ocean Sciences, Bangor University, UK.
- 4- *Ecological models: Useful tools to sustainable development*, 11 March 2013, Superior School of Agriculture of Coimbra (ESEAC); Polytechnic Institute of Coimbra.
- 5- Round table on *Biology in Extreme Ecosystems*, 12 ENEB, March 2012 (Coimbra, Portugal).
- 6- *Long-term predictions of global warming scenarios in mesotidal estuaries. The case of opportunistic macroalgae versus nutrient loading*. ECCLima- Estuaries in a Changing Climate, Porto, Portugal: 5-8 April 2011
- 7- *O uso de modelos ecológicos no conhecimento de ecossistemas remotos: O caso das fontes hidrotermais* (in Portuguese). Universidade Federal da Bahia, 18 March, 2011, Salvador, BA, Brasil
- 8- *Size-dependent variations on the nutritional pathway of Bathymodiolus azoricus demonstrated by a C-flux model*. 10th Annual Meeting of IMAR-Institute of Marine Research, Coimbra, Portugal 6-8 December 2007
- 9- *Estimation of microbial and Bathymodiolus azoricus production at vent fields of the Mid-Atlantic Ridge using a C-flux model* at the Department of Oceanography and Fisheries, University of the Azores and at IFREMER- Centre de Brest, France 2006
- 10- *Does the inter-annual variation on available fish species have significant impacts on the growth and energetics of a Roseate Tern population?* at the Biological Department, University of Southern Denmark, Odense 2002
- 11- *The control of eutrophication by hydrodynamics in a shallow temperate estuary (Mondego estuary, West Portugal)*, Department of Limnology, Lund University, Sweden 2000

Scientific meetings

Talks

- 1- Martins I., Teixeira Z., Gonçalves A.M., Bessa A.F., Veríssimo H., Vinagre P., Marques J.C. Evidence for the long-term contribution of upstream agricultural practices and land use on the biodiversity and function of an estuary and adjacent coastal areas. International Meeting on Marine Research 2016 (IMMR'16). 14-15 July **2016**. Peniche (Portugal).
- 2- Irene Martins, Simeon L. Hill, Ricardo Moreira, José Dias, José Xavier. Food web models of the South Georgia shelf pelagic ecosystem. 7^a Conferência Portuguesa de Ciências Polares. 28-29 October **2015**. Institute of Earth Sciences and University of Évora (Portugal).
- 3- Leite, N., Constantino, E., Guerra, A., Martins, I. Life history traits and production of a ubiquitous amphipod in different habitats. ECSA 54. 12-16 May **2014**. Sesimbra (Portugal).

- 4- Irene Martins, Joana Patrício. Variations on the energy flow along estuarine food webs caused by seasonal fluctuations of opportunistic green macroalgae. SIEBM 12, Donostia (Spain): 11-14 September **2012**
- 5- Nuno Leite, Emanuel Constantino, Irene Martins. Feeding and sheltering preference of *Echinogammarus marinus*: *Fucus* sp. versus *Ulva* sp. SIEBM 12, Donostia (Spain): 11-14 September **2012**
- 6- Emanuel Constantino, Nuno Leite, Alexandra Guerra, Irene Martins. Differences on population structure, dynamics and production of *E. marinus* populations from 3 different estuaries presenting a gradient of environmental pressure: Minho (low-impacted), Mondego (medium-impacted) and Ave (highly-impacted). SIEBM 12, Donostia (Spain): 11-14 September **2012**.
- 7- Alexandra Guerra, Nuno Leite, João Carlos Marques, Irene Martins. Sex-ratio fluctuations acting as resilience mechanisms of amphipod populations. SIEBM 12, Donostia (Spain): 11-14 September **2012**.
- 8- Irene Martins, Aránzazu Marcotegui, Ricardo J. Lopes. Long-term predictions of global warming scenarios in mesotidal estuaries. The case of opportunistic macroalgae *versus* nutrient loading. ECCLima- Estuaries in a Changing Climate, Porto (Portugal): 5-8 April **2011**.
- 9- Souza, A. T., Dias, E., Campos, J., Marques, J. C., Martins, I. Population dynamics of the common goby *Pomatoschistus microps* (Actinopterygii: Gobiidae) in Minho estuary, NW Iberian Peninsula. 2011. ECCLima- Estuaries in a Changing Climate, Porto (Portugal): 5-8 April **2011**.
- 10- Alex T. Ford, Irene Martins. Intersexuality and endocrine disruption in Crustacea: pollution, parasitism or both? Invertebrate Reproduction Conference, Prague (Czech Republic): 18-20 August **2010**.
- 11- Irene Martins, Ana Colaço, Paul R. Dando, Daniel Desbruyères, João Carlos Marques, Ricardo Serrão Santos. Models to understand the functioning of remote ecosystems: An example from the Mid-Atlantic Ridge hydrothermal vents. The 6th European Conference on Ecological Modelling ECEM'07, Trieste (Italy): 27-30 November **2007**.
- 12- Irene Martins, Ana Colaço, Daniel Desbruyères, Pierre-Marie Sarradin, Ricardo Serrão Santos. Estimation of microbial and *Bathymodiolus* production at vent sites of the Mid-Atlantic Ridge using a C-flux model. 11th International Deep-Sea Biology symposium, Southampton (UK): 9-14 July **2006**.
- 13- Irene Martins, Alex T. Ford, Teresa F. Fernandes. Population level effects of intersexuality in the aquatic environment. 41st European Marine Biology Symposium, Cork (Ireland): 4-8 September **2006**.
- 14- Irene Martins, R. Lopes, J. G. Ferreira, J. C. Marques. Modelling opportunistic macroalgae productivity and biomass in a shallow eutrophic estuary. The role of macroalgal zoospores. The Fourth European Conference on Ecological Modelling and EAML-04, The Fourth International Workshop on Environmental Applications of Machine Learning-**2004** (Slovenia).

- 15- Martins, I., J.M. Neto, M.G. Fontes, J.C. Marques, M.A. Pardal. Seasonal variation of short-term survival *Zostera noltii* transplants in a declining meadow: Implications for management in eutrophic estuaries ECSA Local meeting- **2004** (Lisbon, Portugal)
- 16- Jaime A. Ramos, José Pereira, Irene Martins, Ana Meirinho. Distribution, numbers, diet and feeding ecology of Roseate Terns in the Azores: relationships with fisheries and implications for marine Special Protection Areas. 1º Congresso Internacional de Aves do Atlântico- **2004** (Madeira).
- 17- Martins I., Maranhão P., Marques J.C. Modelling the effects of salinity variation on *Echinogammarus marinus* Leach (Amphipoda, Gammaridae) density and biomass in the Mondego Estuary (Western Portugal). XIII Simpósio Ibérico de Estudo de Bentos Marinho-**2002** (Gibraltar).
- 18- Martins I., Pardal M.A., Lillebø A.I., Flindt M.R., J.C. Marques. Control of macroalgae biomass by hydrodynamics in a Western Atlantic shallow estuary (Mondego Estuary, Portugal). American Society of Limnology and Oceanography-ASLO **2000** (Copenhagen)
- 19- Martins I., Oliveira J.M., Flindt M.R., Marques J.C. The effect of salinity on the growth of *Enteromorpha* sp. from the Mondego Estuary (Western Portugal). X Simpósio Ibérico de Estudos de Bentos Marinho- **1998** (Praia do Carvoeiro).
- 20- Martins I., Oliveira J.M., Flindt M.R., Marques J.C. Influência da salinidade no desenvolvimento de "blooms" algais no estuário do Mondego: estudos com a macroalga *Enteromorpha intestinalis* 1º Congresso Estudantes de Biologia- **1998** (Évora).
- 21- Freitas H., Pardal M.A., Martins I. Ecologia das populações de *Zostera noltii* no estuário do rio Mondego. 2º Encontro Nacional de Ecologia- **1997** (Coimbra).
- 22- Martins I., Fontes M.G., Marques J.C. Growth and decay of *Enteromorpha* spp. in the Mondego estuary (Western Portugal). Muddy Coasts 97- An International Senckenberg Conference -**1997** (Germany).
- 23- Pardal M.A., Marques J.C., I. Martins. Influence of eutrophication in the biology, production and dynamics of *Cyathura carinata* (Krøyer) in the Mondego estuary (Western Portugal). 2nd European Crustacean Conference- **1996** (Liège).
- 24- Martins I., Marques J.C., Metelo I., Neto J.M.. Eutrophication processes in the Mondego Estuary: Growth of *Enteromorpha* spp. with and without grazing control. 4th International Conference on Aquatic Ecosystem Health- **1995** (Coimbra).
- 25- Martins I., Marques J.C., Jørgensen S.E., Nielsen S.N.. *Cyathura carinata* (Crustacea: Isopoda), *Enteromorpha* spp. (Ulvales: Chlorophyta) and Organic Matter: An Ecological Model. S.N. Seminário Luso-Francês de Modelação em Hidráulica Marítima- **1994** (Coimbra).
- 26- Marques J.C., Martins I., Teles-Ferreira C., Cruz S. Life cycle, population dynamics and production of *Cyathura carinata* (Crustacea: Isopoda) in the Mondego estuary, Portugal. 6th European Ecological Congress- **1994** (Marseille)

Posters

- 27- Souza AT, Martins I, Gonçalves JFM, Ozório R. Predictive model of food intake of the Seabass *Dicentrarchus labrax* in closed aquaculture systems. XV European Congress of Ichthyology, **2015**, Porto, Portugal.
- 28- Leite, N., Martins, I., Constantino, E., Guerra, A., Cardoso, J.S. Microsporidia infection in the amphipod *Echinogammarus marinus* associated with anthropogenic pressures. ECSA 54. 12-16 May **2014**. Sesimbra (Portugal).
- 29- Souza, A. T., Dias, E., Marques, J. C., Martins, I. Population structure of the European flounder *Platichthys flesus* (Actinopterygii: Pleuronectidae) in Minho estuary, NW Iberian Peninsula. 3-7 June **2012**. 50th ECSA Conference.
- 30- Souza, A. T., Dias, E., Marques, J. C., Antunes, C., Martins, I. Population structure and diet of the sand goby *Pomatoschistus minutus* (Actinopterygii: Gobiidae) in an estuary dominated by the sympatric species *P. microps*. 3-7 June **2012**. 50th ECSA Conference.
- 31- Souza, A. T., Ribas, F. O., Dias, E., Campos, J., Marques, J. C., Martins, I. Population dynamics of the Green crab *Carcinus maenas* (Crustacea: Portunidae) in Minho estuary, NW Iberian Peninsula. ECCLIMA- Estuaries in a Changing Climate, Porto (Portugal): 5-8 April **2011**
- 32- Martins I., Ford A.T., Guerra A., Leite N. Long-term variations of populations of the marine amphipod *Echinogammarus marinus* with and without intersexuality. ECSA 47. 14-19 September **2010**. Figueira da Foz (Portugal).
- 33- Constantino E., Morato T., Gonçalves J., Martins I. The importance of an island sandy beach (Porto Pim, Faial, Azores) as a nursery ground for several fish species. ECSA 47. 14-19 September **2010**. Figueira da Foz (Portugal).
- 34- Souza AT, Dias E, Campos J, Marques JC, Martins I. Population dynamics of the common goby *Pomatoschistus microps* (Actinopterygii: Gobiidae) near the southern edge of its distribution. AQUASHIFT – Life in Warming Waters. 4-7 October **2010**. Kiel (Germany).
- 35- Souza AT, Ilarri MI, Campos J, Marques JC, Martins I. Structural differences in carapace of the green crab *Carcinus maenas* (Decapoda: Portunidae) in two nearby sites in lower Minho estuary, NW Iberian Peninsula. ECSA 47. 14-19 September **2010**. Figueira da Foz (Portugal).
- 36- Souza AT, Ribas FO, Dias E, Campos J, Marques JC, Martins I. Population dynamics of *Carcinus maenas* (Crustacea: Portunidae) in Minho Estuary, Portugal. Student Conference on Conservation Science. 23-25 March **2010**. Cambridge (UK).
- 37- Alex T. Ford, Irene Martins, Alison M. Dunn. Predicting population level effects of infertility in Crustaceans. 17-20 May **2009**. Bordeaux (France)
- 38- Irene Martins, Ana Colaço. Dynamic energy budget models of the mixotrophic vent mussel *Bathymodiolus azoricus*. 1st International Dynamic Energy Budget symposium. 19-22 April **2009**. Brest (France).
- 39- Teresa F. Fernandes, Irene Martins, Alex T. Ford. Population level effects of intersexuality in the marine environment. SETAC Europe 2007- May **2007** (Porto).

- 40- Alex T. Ford, Irene Martins, Teresa F. Fernandes. Population level effects of intersexuality in Crustacea. PRIMO 14. May **2007** (Florianopolis, Brazil).
- 41- Teresa F. Fernandes, Irene Martins, Alex T. Ford. Population level effects of intersexuality in the marine environment. Challenger Conference for Marine Science. September **2006** (Oban, Scotland).
- 42- A.I. Sousa, I. Martins, M.R. Flindt, M.A. Pardal. Influence of salinity, nutrients and light on germination and growth of *Enteromorpha intestinalis* spores. ASLO Summer meeting, A Pilgrimage Through Global Aquatic Sciences- **2005** (Santiago de Compostela).
- 43- A.I. Sousa, I. Martins, M.R. Flindt, M.A. Pardal Influência da salinidade e dos nutrientes no crescimento dos esporos de macroalgas oportunistas. 9º Encontro Nacional de Ecologia- **2004** (Coimbra).
- 44- Martins I., Costa Pereira J., Ramos J., Jørgensen S.E. Modelling growth and provisioning of Roseate Tern chicks: The impact of fluctuations in the abundance of fish species. 38th European Marine Biology Symposium- **2003** (Aveiro)
- 45- Martins I., Oliveira J.M., Marques J.C. Modelo de um produtor primário importante do Estuário do Mondego: *Enteromorpha* spp.- Diagrama conceptual e equações preliminares. 2º Encontro Nacional de Ecologia- **1997** (Coimbra)
- 46- Martins I., Marques J.C Modelo Trófico do Estuário do Mondego: Diagrama Conceptual.” 1º Encontro Nacional de Ecologia- **1996** (Oeiras)
- 47- Martins I., Marques J.C., Jørgensen S.E., Nielsen S.N.C. *carinata*, *Enteromorpha* spp. and Organic Matter. Top-Bottom or Bottom-Top Control? The answer by an Ecological Model. 24th ECSA Symposium-Northern and Southern Estuaries and Coastal Areas- **1994** (Aveiro)

Awards, grants and organization of scientific events

Awards

Winner of the 1st edition of the scientific award “Luís Rocha Monteiro” with the work “Modelling the effects of different fish prey species on the growth of Roseate Tern chicks”, attributed by the Regional Environmental Secretary of the Azores (2004).

Grants

- 1- Postdoctoral grant from the Portuguese Foundation for Science and Technology (FCT) (2005-2008)
- 2- Postdoctoral grant from the Portuguese Foundation for Science and Technology (FCT) Programa Operacional Ciência, Tecnologia e Inovação (2001-2004)
- 3- Post-Doc grant from IMAR – Institute of Marine Research, Coimbra Interdisciplinary Center, Portugal (2000-2001)
- 4- Ph.D. grant from the Portuguese Foundation for Science and Technology (FCT) Program PRAXIS XXI (1995-1999)

- 5- M.Sc. grant from The Portuguese Board for Scientific and Technological Research (JNICT) Program CIÊNCIA (1992-1994)

Events

- Organization and coordination of the course: “Fitting empirical data to numerical models: Uncertainty analysis” lectured by Christian Damgaard (National Environmental Research Institute, Denmark), IMAR, Department of Zoology, University of Coimbra 30th June-4th July 2008.
- Member of the organizing committee of the scientific meeting ECSA 47, Figueira da Foz (Portugal), 14-19 September 2010.

PEDAGOGIC ACTIVITIES

As invited lecturer at Postgraduate programmes (national & international)

- 1- Intensive course on **Introduction to Ecological Modelling** CEM- Centro de Estudos do Mar, UFPR- Universidade Federal do Paraná, Pontal do Paraná, Brazil (**7-11/4/2014**) Theoretical and practical lectures (integral)
- 2- Workshop on **Ecological Modelling** Federal University of Bahia, Salvador, Brazil (**22-23/04/2014**)
- 3- **Intensive Course on Estuaries** Post-graduation program on Ecology from the Department of Biology of the State University of Paraíba (Brazil). **2012** Theoretical and practical lectures (in collaboration)
- 4- Intensive course on **Ecological Modeling** within the subject Ecosystem Modelling from the Master course on Ocean Integrated Studies (MEIO) from the Department of Oceanography and Fisheries of the University of the Azores (**May 2011**) Theoretical and practical lectures (integral)
- 5- **Initiation to Ecological Modelling** within the Post-graduation course on Ecology and Bio-monitoring from the Department of Biology of the Federal University of Bahia (Brazil) (**March 2011**) Theoretical and practical lectures (integral)
- 6- Theoretical and practical lectures (in collaboration) of **Marine Biology and Ecology** at the Department of Life Sciences, University of Coimbra (**2008-2012**)
- 7- Theoretical and practical lectures of the Advanced Course **Environmental Quality Assessment and Management** within the M.Sc. and Post-Graduation in Ecology, Dep. of Life Sciences, University of Coimbra, in collaboration with S.E. Jørgensen and S.N. Nielsen (**2007-2012, 2016**)
- 8- Practical lectures of the Advanced Course **Ecological Modelling** within the M.Sc. and Post-Graduation in Ecology, Dep. Zoology, University of Coimbra, in collaboration with S.E. Jørgensen and S.N. Nielsen (**1998-2007**)
- 9- Theoretical and practical lectures (in collaboration) of the Advanced Course within the M.Sc. and Post-Graduation in Ecology, Dep. Zoology, University of Coimbra **Feedback mechanisms between autotrophic/heterotrophic processes and nutrient dynamics**. The use of mass balances in aquatic systems management (**2000/2001/2005**)

- 10- Practical lectures of an intensive course on **Ecological Modelling** in collaboration with S.E. Jørgensen at the Dep. Of Oceanography and Fisheries, University of the Azores. (2003)
- 11- Theoretical and practical lectures (integral) of **Analysis of Environmental Systems** at the Polytechnic Institute of Coimbra. (2002)
- 12- Theoretical and practical lessons on **Ecological Modelling** within the M.Sc. and Post-Graduation in Hydraulics and Environment, Dep. Civil Engineering, University of Coimbra, in collaboration with J.C. Marques (1997/1999/2001)

Jury at MSc. and PhD. dissertations

- 1- Colheita sustentável de uma espécie invasora bem sucedida: implicações para a comunidade macrozoobentónica (in Portuguese). Pedro Filipe Oliveira da Silva. MSc. on Ecology. Universidade do Minho (Portugal). **2017**
- 2- Abundance, structure and distributional patterns of core secondary producers in a temperate estuary: Driving factors and climate change scenario simulations”. Allan T. Souza. **PhD dissertation**, Instituto de Ciências Biomédicas Abel Salazar, University of Porto (Portugal). **2013**
- 3- Spatial and temporal variability of benthic producers and consumers $\delta^{13}C$ and $\delta^{15}N$ signatures in the Mondego estuary food web. Dimitri Vilhena Barroso. **MSc. on Ecology**, Department of Life Sciences, University of Coimbra (Portugal). **2010**
- 4- A spatially dynamic simulation of the Azores bullfinch occurrence in the scope of the Laurisilva forest conservation. Rita Coelho Bastos. **MSc. on Ecology**, Department of Life Sciences, University of Coimbra (Portugal). **2010**
- 5- Population dynamic models of different *Echinogammarus marinus* populations from the Mondego estuary. Impacts of intersexuality on the variation of natural populations. Alexandra Guerra. **MSc. on Ecology**, Department of Life Sciences, University of Coimbra (Portugal). **2010**
- 6- Spatial distribution of the subtidal meiofauna communities along a salinity gradient in two southern European estuaries. Ana Sofia Alves. **MSc. on Biology and Ecology of Marine Littoral Communities**. University of Évora (Portugal). **2008**
- 7- Influence of environmental variables on reproductive and diet parameters of *Sternula albifrons* at Ria Formosa, Algarve. António Matos. **MSc. on Ecology**, Department of Life Sciences, University of Coimbra (Portugal). **2009**

Other pedagogic activities (practical lectures)

- Marine Biology Practical 1(OSX 1002) 20 credits or 10 ECTS Credits, Level 1, Semester 1 & 2. School of Ocean Sciences, Bangor University, UK. **2013-2014**
- Prince Madog Cruise (OSX 2007) 20 credits or 10 ECTS Credits, Level 2, Semester 1 & 2. Practical lectures on board the RV Prince Madog. School of Ocean Sciences, Bangor University, UK. **2013-2014**

OTHER RELEVANT ACTIVITIES FOR THE UNIVERSITY MISSION

Administrative tasks

- Member of the team leading the accreditation process of the courses lectured at the School of Ocean Sciences, Bangor University, UK in the IMarEST, the professional body for accreditation of marine engineers, scientists and technologists (www.imarest.org). **2014**, School of Ocean Sciences, Bangor University, UK.
- Member of the admissions team at the School of Ocean Sciences, Bangor University, UK. The task of the team, which was constituted by 6 members of staff, was to decide on strategies to capture new students for SOS. Monthly meetings. **2013-2014**.
- Member of the evaluation team for hiring a new member of staff for PhD/Lectureship (**04/12/2013**) School of Ocean Sciences, Bangor University, UK.

Board meetings

- Monthly board meetings at the School of Ocean Sciences, Bangor University, UK. **2013-2014**.

International networking

- Meetings with international officers of Bangor University responsible for networking with Angola, Mozambique and Brazil. **2013-2014**
- Promoting the School of Ocean Sciences, Bangor University, UK in Brazil- CEM, Universidade Federal do Paraná and Instituto de Biologia, Universidade Federal da Bahía. **April 2014**

Capturing new students

- Member of team of UCAS (Undergraduate Courses at University and College) open days at the School of Ocean Sciences, Bangor University, UK (**17/02/2014, 31/03/2014**)

OCEANOGRAPHIC CRUISES/ ON BOARD ACTIVITIES

Practical lectures of Marine Biology (School of Ocean Sciences, Bangor University, UK) on board the RV “Prince Madog”. **2014**

Mission on board the RV “Arquipélago” (IMAR, DOP, University of the Azores) to recover experimental cages placed at the hydrothermal vent field Menez Gwen, located at the AZORES Triple Point (Middle Atlantic Ridge) **2007**

KNOWLEDGE OF LANGUAGES

Portuguese- Native language

English – Fluent (spoken & written)

French – Good (spoken & written)

Spanish – Sufficient (spoken)

OTHER SKILLS

Diver license - Sports Diver

Basic Course of Photography

Basic Course of GIS ARCVIEW

Basic Course of Remote Sensing

Management of Local Accommodation Unit

MEMBERSHIPS

International Society of Ecological Modelling (ISEM)

Liga para a Protecção da Natureza (LPN)

Coimbra, 18th of September 2017

Irene Isabel da Veiga