

NAME Pedro Miguel Guerreiro da Costa Guerreiro		POSITION TITLE Senior Research Fellow, since 2007		
Local and date of birth Faro, 13 March 1973	Nationality Portuguese	Centre of Marine Sciences Portugal		
INSTITUTIONAL ADDRESS Comparative and Molecular Endocrinology Centre of Marine Sciences Universidade do Algarve at Campus de Gambelas 8005-139 Faro, Portugal		CONTACTS email: pmgg@ualg.pt tel: +351289800900 x7375 fax: +351289800069 cell: +351914654414		
EDUCATION/TRAINING				
INSTITUTION AND LOCATION	DEGREE/POSITION (if applicable)	YEAR(s)	FIELD OF STUDY	
University of Algarve, Portugal	Lic. (>B.S. <M.Sc.)	1996	Marine Biology	
Radboud University Nijmegen, The Netherlands	Ph.D.	2002	Animal Physiology	
Centre of Marine Sciences, Portugal	Post-doc	2002-2007	Endocrinology	
University of Connecticut, USA	Post-doc	2003-2005	Renal Physiology	
Mount Desert Island Biological Laboratory, USA	Visiting Research Scholar Summer researcher	2007-2012 2005/07/09/ 10/11	Epithelial transport	

A. Professional Experience

- PRESENT AND RECENT PROFESSIONAL STATUS:

- Research Officer (Investigador auxiliar), Centre for Marine Sciences, CIMAR, Laboratório Associado, Portugal
- Invited Assistant Professor in Endocrinology and Animal Physiology, FCT/DCBM, University of Algarve, Portugal (2013-2016)
- Research Specialist, Dept. Physiology and Neurobiology, University of Connecticut, USA (Gratis appointment, 2005-2015)

- ADVANCED COURSES:

- 2015, Advanced Course in Animal Experimentation, CIIMAR/CCMAR
- 2009, Bioinformatics on Molecular Evolution, Phylogenetics and Adaptation, Gulbenkian Institute of Science
- 2004, Post-Graduate Course on Animal Cell Culture, Faculty of Pharmacy, University of Lisbon
- 2001, International Course on Biology of Fish Larvae Production, organised jointly by Fish Culture and Fisheries Group at Wageningen University, Centre of Marine Sciences (CCMAR) and AquaTT, Dublin
- 1995, Course on Applied Statistics, Universidade do Algarve.
- 1994, Mini-course on Developmental Biology and Confocal Microscopy, Universidade do Algarve, by Dr. C.P. Correia, Dr. D. Poccia and Dr. R. Summers (New York State University, USA)

- RESEARCH ACTIVITIES AND COLLABORATIONS:

- Jan-mar 2017 Antarctic Research at the Great Wall, CN and Yelcho, CL Antarctic Stations
- Mar-Apr 2016 Research at Dept Marine Biology and Limnology, Univ Austral de Chile, Valdivia, Chile
- Jan-Mar 2016 Antarctic Research at the Great Wall Antarctic Station, Chinese Acad. Sciences
- Jan-Mar 2013 Antarctic Research at the Henryk Arctowski Antarctic Station, Polish Acad. Sciences
- Jun-Jul 2012 Summer Research at the Dept Physiology and Neurobiology, University of Connecticut, USA
- Jan-Mar 2012 Antarctic Research at the Henryk Arctowski Antarctic Station, Polish Acad. Sciences
- Aug-Sep 2011 Summer Research at the Mount Desert Island Biological Laboratory, Maine, USA
- Aug-Sep 2010 Summer Research at the Mount Desert Island Biological Laboratory, Maine, USA
- Aug-Sep 2009 Summer Research at the Mount Desert Island Biological Laboratory, Maine, USA
- Jan-Feb 2009 Research at the Fish Endocrinology Group, Dept. Zoology, Univ. Gothenburg, Sweden
- Jan 2008 Research at the Fish Endocrinology Group, Dept. Zoology, Univ. Gothenburg, Sweden
- Jun-Jul 2007 Summer Research at the Mount Desert Island Biological Laboratory, Maine, USA
- Jun-Jul 2005 Summer Research at the Mount Desert Island Biological Laboratory, Maine, USA
- 2003-2005 Post-doctoral project Dept. of Physiology and Neurobiology of the University of Connecticut, Advisor Prof. Dr. J. Larry Renfro
- 2003-2007 Postdoctoral fellow, Molecular and Comparative Endocrinology Group, CCMAR, Univ. Algarve, Advisor Prof. Adelino Canario

- Mar-Jun 2001 Research at the Department of Animal and Vegetal Biology and Ecology of the University of Cadiz, Spain, in the frame of the EU Socrates Exchange Programme, conducting experiments in co-operation with Prof. Juan Miguel Mancera
- 1997-2001 Research at the Department of Animal Physiology of the University of Nijmegen, The Netherlands, in the context of EU research projects and PhD Programme, Advisor Prof. Gert Flik
- 1997-2001 Research at the Faculty of Marine and Environmental Sciences, University of Algarve, in the context of EU research projects and PhD Programme, Advisor Prof. Deborah Power

➔ Participation in professional workgroups

- COST (European Cooperation in Science and Technology) Action FA 1004. Conservation Physiology of Marine Fishes. International Management Committee member, convener for 2013 meeting. http://www.cost.eu/domains_actions/fa/Actions/FA1004
- COST (European Cooperation in Science and Technology) Action FA 867 Welfare of fish in european aquaculture. National Delegate. http://www.cost.eu/domains_actions/fa/Actions/867
- Portuguese Polar Program. Participant, organizer of the 2013 national conference.

- RESEARCH PROJECTS:

➔ **As participant:**

- "NEMED – Dynamics of Norway lobster (*Nephrops norvegicus*) populations". Dr. F. Sarda (Univ. Barcelona) and Dr. M. Castro (Univ. Algarve), funded by the EU, 1993-1995
- "The role of thyroid hormones and their receptors in development and growth of the sea bream: a molecular biology approach". Dr. Deborah M. Power, financed by the EU (AIR2-CT93-1483), 1993-1995
- "Vertebrate Renal Anion Transport" Prof. Dr. J. Larry Renfro, funded by the US National Science Foundation (IOS 0416954/2004-2007)
- "Choroid plexus control of cerebrospinal fluid inorganic phosphate " Prof. Dr. J. Larry Renfro, funded by the US National Science Foundation (IOS 0843253/2004-2011)

➔ **As member of research team:**

- "PTHrP in sea bream development and physiology". Prof. Dr. Adelino V. M. Canario, financed by the EU (FAIR-CT96-1422), 1996-2000
- "The role of Parathyroid hormone-related protein (PTHrP) and prolactin family gene products in calcium regulation in the sea bream (*Sparus aurata*)". Dr. Deborah M. Power, funded by the Portuguese Foundation for Science and Technology (PRAXIS/P/BIA/13174/98), 1999-2002.
- "Osmoregulation in the sea bream: contribution of the branchial excretory mechanisms" Portuguese-Spanish Integrated Actions Programme, E 82/00 (2000-2001), financed by the Portuguese Council of Rectors
- "Influence of salinity and stress on PRL, GH and SL expression in the gilthead sea bream (*Sparus aurata*)" Portuguese-Spanish Integrated Actions Programme (2002-2003), financed by the Portuguese Council of Rectors
- "Calcium, the backbone of fish culture: importance in skeletal formation, reproduction and normal Physiology". Prof. Dr. Adelino V. M. Canario, financed by the EU (Q5RS-2001-1465), 2001-2004.
- "Physiology of the osmoregulatory system in larval stages of the sea bream (*Sparus aurata*).". Prof. Dr. Juan Miguel Mancera, funded by the Spanish Ministerio de Ciencia y Tecnologia, 2002.
- "Physiology of PTHrP in fish, relevance to calcium balance of an unique hypercalcemic factor" Dr. Juan Fuentes, funded by the Portuguese Foundation for Science and Technology (POCTI/CVT/48946/2002), 2004-2007.
- "Stanniocalcin in sea bream: interaction with hypercalcemic factors in calcium balance" Dr. Juan Fuentes, funded by the Portuguese Foundation for Science and Technology (POCTI/CVT/55683/2004) 2005-2008.
- "Parathyroid hormone (PTH)-like peptides in fish: from gene to function" Dr. Deborah M Power, funded by the Portuguese Foundation for Science and Technology (POCI/CVT/61090/2004) 2005-2008.
- "Functional characterization of PTHL: A novel member of the parathyroid hormone family" Prof. Dr. Adelino V. M. Canario, funded by the Portuguese Foundation for Science and Technology (POCI/CVT/66735/2006) 2007-2010.
- "Biom mineralisation in seawater fish intestine: endocrine perspective" Dr. Juan Fuentes, funded by the Portuguese Foundation for Science and Technology (PTDC/MAR/104008/2008), 2010-2013.
- "Oocyte maturation in fish: Paracrine regulation by BMP-15 and GDF-9" Dr. Laurence Deloffre, funded by the Portuguese Foundation for Science and Technology (PTDC/CVT/104750/2008), 2010-2013.
- "Parathyroid hormone-related peptide and Stanniocalcin: new metabolic factors?" Prof Adelino Canario, funded by the Portuguese Foundation for Science and Technology (PTDC/MAR/121279/2010) 2011-2013
- "Choroid plexus control of cerebrospinal fluid inorganic phosphate" Prof JL Renfro, (NSF 0843253) 2009-2012
- "A novel regulator of puberty in fish" Dr. Patricia Pinto, funded by the Portuguese Foundation for Science and Technology (PTDC/MAR-BIO/3890/2012) 2012-2015
- "E2SCALE: Scaling-down estrogenic responses in fish" Dr. Patricia Pinto, funded by the Portuguese Foundation for Science and Technology (PTDC/AAG-GLO/4003/2012) 2012-2015

- "Fish hormones and the ocean carbon cycle" Dr. Juan Fuentes, funded by the Portuguese Foundation for Science and Technology (PTDC/MAR-BIO/3811/2012) 2012-2014
- "Physiological and molecular plasticity to thermal and osmoregulatory challenges in Antarctic fishes. Dr. Adelino Canario, funded by the Portuguese Foundation for Science and Technology (PTDC/BIAANM/3484/2014), 2016-2018.
- "Evolution of host defence in notothenioid fishes in the Antarctic Ocean". Dr. Adelino Canario and Dr. Lianbiao Chen, funded by the National Natural Science foundation of China and the Portuguese Foundation for Science and Technology 2017-2019.

As Principal or Co-Investigator (FCT-PTDC projects, co-responsible in International projects and post-doctoral grants)

- "PHOS-Fate in fish: Through guts, bones and kidneys" Dr. Pedro M Guerreiro, funded by the Portuguese Foundation for Science and Technology (PTDC/BIA-ANM/4225/2012), 2013-2015.
- "Identificación y caracterización de un nuevo neuropeptido involucrado en la homeostasis del fosfato. Un elemento clave para la sostenibilidad a largo plazo del cultivo intensivo de peces PI - Dr. Josep Rotllant, Ministerio De Ciencia e Innovación, Plan Nacional De I+D+I 2014; Investigador, 2015-2018
- "Functional characterization of epidermal mucus in fish with productive interest: non-invasive methodology for identifying biomarker molecules and relationship to the physiological state" Dr. Antoni Ibarz, Ministerio De Economía y Competitividad, Proyectos Excelencia y Proyectos Retos 2015; 2016-2019
- "Caracterización y regulación de los marcadores fisiológicos de la respuesta a las bajas temperaturas en la dorada: estados nutritivo, redox y regulación endocrina" PI - Dr. Antoni Ibarz, Ministerio De Ciencia e Innovación, Plan Nacional De I+D+I 2008-2011; Subprograma de Proyectos de Investigación Fundamental, 2012-2015.
- "The role of Parathyroid Hormone-related Peptide on the function and regulation of cell membrane ion transporters in fish" awarded by the Portuguese Foundation for Science and Technology (BPD/9424/2002) 2002-2005.
- "Modulation of PTH-Like Peptides Production and the Roles on Glomerular and Aglomerular Fish Renal Processes" awarded by the Portuguese Foundation for Science and Technology (BPD/9424/2002) 2005-2007.

- RESEARCH INTERESTS AND EXPERIENCE:

The past and current research objectives are essentially concerned with the relations between the environmental factors and the physiological and endocrine responses that lead to adaptation in animals. I am also quite interested in peculiar and unique aspects of comparative and evolutionary animal ecophysiology, namely on fishes from diverse niches in polar, temperate and tropical environments, and in the processes occurring in ontogeny and early development of animals that determine adaptation. I have supervised several students working on the facultative urea excretion and ammonia tolerance in fish, and I am currently studying the stress response and coping mechanisms of Antarctic fish to climate change, and using physiology information to better tackle the question of invasive species. I have a keen interest on how natural and man-made toxicants work to disrupt the endocrine and other physiological pathways that are needed for adaptation.

The regulation of ion, namely calcium and phosphate, and water balance in fish, the interaction of the osmoregulatory organs and the body control mechanisms, at the organism level, are on-going subjects of investigation. Current interests involve the determination of the PTH/PTHrP receptor types in ion-regulatory tissues and the mechanisms that mediate the response to endocrine stimuli, leading to the effective changes in ion transport. I am currently involved in determining the roles of PTH-like peptides and FGF23, namely those concerning calcitropic and phosphatotropic actions in transporting systems and in mineralized structures. I am studying the effects of this factor on ion transport across branchial, renal and intestinal cells, the binding to receptors and the related intracellular pathways. To further pursue these subjects, I use primary cell culture and cell lines as research systems and also use the shark choroid plexus as an epithelial model.

I have carried out research in several laboratories in Europe, the USA and in the Antarctica, combining physiology and molecular biology methods, using whole organisms, tissues and cell cultures as work models. Briefly, in my experiments I have studied dynamic processes such as ion transport, using radiotracer and electrophysiology techniques, in live animals and cell cultures exposed to different treatments, handling stress or environmental conditions. I have experience in biochemical techniques such as radioimmunoassays, enzyme activity, receptor/ligand binding, and in a range of molecular biology techniques used to establish the presence and the modulation of the expression of several genes. Finally, I have considerable experience in fish husbandry, including the design and building of aquarium systems, and in fish surgery and manipulation, both in the lab and in field sampling campaigns.

- TEACHING ACTIVITIES AND POSITIONS:

➔ Post-graduate (MSc Courses)

- 2014 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2013 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2012 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2011 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2010 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2009 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2009 Human Biology, Master in Teaching in Science, University of Algarve
- 2007 Human Endocrinology, Master in Biomedical Sciences, University of Algarve
- 2006 Human Biology, Master in Studies in Biology and Geology for Education, University of Algarve
- 2004 Human Biology, Master in Studies in Biology and Geology for Education, University of Algarve

➔ Graduate (BSc Courses)

- 2011-present Instructor for the module of osmoregulation, Animal Physiology, FCT, University of Algarve
- 2013-2014 Invited Assistant Professor, Regent of Animal Physiology, FCT, University of Algarve
- 2002-2003 Invited Assistant Professor, Lab classes of Animal Physiology, FCMA, University of Algarve
- 1994/95 Instructor, Applied Statistics, Faculty of Marine and Environmental Sciences, Univ. Algarve
- 1993/94 Instructor, Organic Chemistry, Faculty of Marine and Environmental Sciences, Univ. Algarve

➔ Supervision of BSc projects

- 2014 Ms. Beatriz Cruz, BSc Marine Biology, "Renal function in the Antarctic fish *Notothenia rossii* exposed to salinity and temperature challenges"
- 2014-2015 Ms. Marta Vargas, BSc Marine Biology, "Endocrine modulation of behavior during hierarchy formation and couple interaction in *Australoheros facetus*"
- 2014-2015 Ms. Mariana Silva, BSc Biology, "Thermal and hypoxia limits in the invasive cichlid *Australoheros facetus* in streams of southern Portugal"
- 2014-2015 Ms. Jessica Soares, BSc Biology, "Osmoregulation, salinity tolerance and potential for invasion of estuarine habitats by *Australoheros facetus*"
- 2014-2015 Ms. Ana Eufrásio, BSc Marine Biology, "Stress response in Antarctic fish: plasma parameters in a climate change context"
- 2015-2016 Ms. Daniela Teixeira, BSc Marine Biology, "Modulation of social behavior by environmental salinity in *Australoheros facetus*"
- 2015-2016 Mr. Diogo Soares, BSc Marine Biology, "Growth and energy metabolism in *Australoheros facetus* at different salinities"
- 2016-2017 Ms. Sara Carvalho, BSc Marine Biology, "Stress response in the sub-Antarctic fish *Eleginops maclovinus* exposed to different temperatures"
- 2016-2017 Ms. Rita Silvestre, BSc Biology, "Blood serum composition in the Antarctic *Notothenia rossii* before and after temperature changes"
- 2016-2017 Ms. Catarina Figueiredo, BSc Biology, "Effects of salinity in the renal function of the aglomerular fish *Halobatrachus didactylus*"
- 2016-2017 Ms. Micaela Justo, BSc Marine Biology, "Urea and ammonia excretion in the euryhaline toadfish acclimated at different salinities"

➔ Supervision of "Honors" and Master projects

- 2006 Ms. Elisabete Caldas, Honors Biochemistry, "Environmental and endocrine control of scale regeneration and mineralization in the sea bream, *Sparus auratus*"
- 2008 Ms. Vera Jordão, **MSc** Marine Biology, "Ammonia tolerance and Ureotely in the Lusitanian toadfish, *Halobatrachus didactylus*"
- 2010 Ms. Maria João Silva, **MSc** Marine Biology, "Control of ammonia during fish transport: the usage of AmQuel® in laboratory trials"
- 2012 Mr. Adérito Matos, **MSc** Marine Biology, "GSase activity in the Ornithine-Urea cycle in toadfish (*Halobatrachus didactylus*): effects of environmental ammonia and cortisol treatment"
- 2013 Ms. Mónica Amaral, **MSc** Aquaculture, "New drugs to combat the fish parasite *Amyloodinium ocellatum*: in vitro and in vivo trials"
- 2015 Ms. A. Catarina Afonso, **MSc** Biomedical Sciences, "Expression, phosphate transport capabilities and roles in cell proliferation of the SLC20 family of leukemia virus receptors in fish and murine models"

➔ Supervision of PhD candidates and post-doctoral fellows

- 2017-2020 Ms. Carmen SV Sousa, PhD candidate in Biological Sciences at University of Algarve, “Evolution of the immune system in Antarctic notothenioids”, funded by the Portuguese Foundation for Science and Technology SFRH/BD/120040/2016, on-going
- 2015-2018 Mr. Pedro F Palma, PhD candidate in Biological Sciences at University of Algarve, “Metabolic effects of the calcitropic hormones stanniocalcin and parathyroid hormone related protein”, funded by the Portuguese Foundation for Science and Technology SFRH/BD/103185/2014, on-going
- 2013-2017 Ms. Flávia B. Vaz da Silva, PhD candidate in Biological Sciences at University of Algarve, “Populacional dynamics, environmental tolerance and social and reproductive behavior of *Australoheros facetus* (Cichlidae): physiological and molecular adaptive mechanisms in this invasive species in Portugal”, funded by the Brazilian Programme Science Without Borders, 245971/2012-2. Completed February 1st 2018
- 2013/3-2014/10 Dr. Alexssandro G Becker, post-doctoral fellow at CCMAR, “Novel actions of hormones stanniocalcin and parathyroid hormone-related protein in fish: physiological and molecular approaches to interactions between environment and metabolic state”, funded by the Brazilian Programme Science Without Borders, 246702/2012-5
- 2014/11-2017/10 Dr. Alexssandro G Becker, post-doctoral fellow at CCMAR, “Calcium and magnesium regulation in the kidney of glomerular and aglomerular fish: physiological and molecular responses of marine and Amazonian fish”, funded by the Portuguese Foundation for Science and Technology SFRH/BPD/96187/2013

➔ Outreach activities

- In the context of CCMAR policy for dissemination of scientific awareness I am involved in preparing and presenting classes in many high-schools and Science Centres/Museums of the Algarve, namely on the Human Genome, DNA and PCR techniques and Evolution, and Polar Science. In these talks there is plenty interaction with students of different ages and backgrounds, and in addition to the subject of the talk many other issues of science are discussed with both the students and the teachers. I participate actively in the preparation and exhibition of science labs for CCMAR visitors from all levels of teaching, from elementary to secondary schools and also in hands-on demonstrations during national and local events in which CCMAR participates. About 5/yr.
- Speaker at SEMANAS POLARES/POLAR WEEKS, a dissemination activity in schools or via skype conferences through projects "Educação PROPOLAR" and "Profissão: Cientista Polar", associated to PROPOLAR (Portuguese Polar Programme), APECS PORTUGAL and APECS internacional
- Participation in the European Researchers' Night events in the frame of CCMAR
- Participation as speaker in the national Workshop “Portuguese Polar Campaign 2011-12: Overview, Preliminary results and Perspectives” June 11, 2012, Instituto Hidrográfico, Lisboa, Portugal
- Participation as speaker in the national Workshop "Education & Science: from polar research to the class room”, March 1, 2014 at Instituto de Educação e Cidadania (IEC), Mamarrosa, Aveiro, Portugal.
- Host of small projects for high school students in summer, in the frame of the national programme Ciência Viva no Laboratório - Ocupação Científica de Jovens nas Férias, promoted by Ciência Viva, the National Agency for Science and Technology Culture
- Organizer of the CCMAR Seminar Series (2009-present), weekly 30-60 minute presentations/discussion by in-house and invited speakers, on the subjects of marine science and biology.
- Radio show on Science (2010-present), at RUA FM, where recent scientific papers or achievements are discussed weekly in an informal conversation with co-hosts or invited scientists.
- Attendance to several workshops on techniques for communicating science
- Pittman, K., Rønnestad, I., Gavaia, P., Cancela, M.L., Guerreiro, P.M., Ribeiro, L., Aragão, C., Hamre, K., Moren, M., Yúfera, M, Conceição, L. 2007. Fish Larval Research: a tool for sustainable food production and understanding environmental impacts on developing organisms. *Aquaculture Europe* 32 (4), 5-10.

- TEACHING EXPERIENCE AND PHILOSOPHY:

I have been involved in teaching since 1993/94, when I was appointed a teaching assistant, providing support in Organic Chemistry classes and Applied Statistics classes. During my PhD studies I was often involved in the informal supervision of undergraduate students in the laboratory. After obtaining my PhD I was invited to teach the Animal Physiology laboratory classes in the Marine Biology Degree. Here I had the opportunity to redesign the classes and create a new set of lab exercises, changing from a rather anatomical view of physiology to a more dynamic and experimental approach, with several in vitro, ex vivo and in vivo experiments, where a given physiological process can be followed and modified, using classical or cutting edge techniques. This provides students with a more clear understanding of a fundamental concept in physiology – homeostasis – as we can follow the actions and mechanisms employed by the animal to regain equilibrium, either osmotic, or thermal, or other. Central notions – such as adaptation (are the mechanisms employed sufficient to meet the challenge of current or novel environmental

conditions?), metabolic costs (is it affordable for an organisms to live in such conditions?), and the required physiological and genetic plasticity are also easily explained from here. I believe this hands-on approach aids to engage the students and to increase understanding of fundamental biological processes and, by trying to predict and discussing the outcome of each manipulation, promotes the development of analytical skills. Through my research I can provide in focused yet integrative lectures, several examples on how animals, of different taxa, can thrive in stable and in extreme environments, respond to an immediate stress or to long-term changes, and how a system of signals, hormones, controls homeostasis, life cycles, adaptation and ultimately evolution.

I have recently been responsible, by invitation, for the undergraduate level Animal Physiology course 2013/2014. Generally I offer topic seminars/practical labs on stress physiology, osmoregulation and radioisotope use for the Animal Physiology and other undergraduate and graduate courses. At the post-graduate level, having previously taught Human Biology, I am, since 2009, co-responsible for teaching Human Endocrinology and since 2014 also for Comparative Physiology – Animal Models for the Master Course in Biomedical Sciences, at Universidade do Algarve, which provides an optimal and challenging stage to draw interesting and applied comparisons between the several model species used in animal physiology and human medicine. This is an intensive course, which mixes lectures and lab classes with paper presentations by the students, usually of subjects they relate to, followed by lively class discussions.

- AWARDS AND GRANTS:

- 1996 Award “Governo Civil de Faro”, for best final average mark at the University of Algarve
- 1996 Doctoral scholarship from the Portuguese Foundation for Science and Technology, PT
- 2000 Socrates European Exchange Programme, EU
- 2002 Post-Doctoral grant from the Portuguese Foundation for Science and Technology, PT
- 2005 Post-Doctoral grant from the Portuguese Foundation for Science and Technology, PT
- 2005 Scholarship recipient from Luso-American Foundation for Development, PT
- 2005 and 2007 Short-period research grant from the Calouste Gulbenkian Foundation, PT
- 2007 Travelling grant from the Society for Experimental Biology, UK
- 2008 Aquagenome-Marine Genome Consortium research fellowship
- 2015 Propolar – Portuguese polar Programme – travel and logistics grant
- 2016 Propolar – Portuguese polar Programme – travel and logistics grant

➔ Memberships

- American Physiological Society, Regular Member, Comparative Physiology Section
- Society for Experimental Biology, Full Member, Official University contact
- Sociedade Ibérica de Ictiologia, Full Member and Vice-President
- Asociación Iberica de Endocrinología Comparativa, Full Member and member of Directive Board
- Ordem dos Biólogos, Full Member

- REFEREEING:

- Anatomia, Histologia, Embryologia, Wiley
- Aquaculture (Physiology & Endocrinology and Husbandry & Management sections), Elsevier Science
- Aquatic Toxicology, Elsevier Science
- Cientia Marina, Institut de Ciències del Mar de Barcelona (CSIC)
- Comparative Biochemistry and Physiology, Elsevier Science
- Environmental Biology of Fishes, Springer
- Fish Physiology and Biochemistry, Springer
- General and Comparative Endocrinology, Elsevier Science.
- Integrative Zoology, Wiley
- Journal of Applied Ichthyology, Blackwell Publishing
- Journal of Experimental Marine Biology and Ecology, Elsevier Science
- Journal of Fish Biology, Wiley
- Molecular and Cellular Endocrinology, Elsevier Science
- Marine Biology, Springer
- Marine Genomics, Elsevier Science
- Physiological and Biochemical Zoology, Chicago University Press
- Polar Biology, Springer

- MEETING ORGANIZATION

- 7th Conference of the Iberian Society of Ichthyology, 12-16 June 2018, Faro, Portugal, in preparation
- Osmoregulation Session, Annual Meeting of the Society for Experimental Biology, July 2016, Brighton, UK
- 10th International Symposium on the Reproductive Physiology of Fish, 25 – 30 May 2013, Olhão, Portugal
- 5th Portuguese Conference on Polar Sciences, 31 Oct – 1 Nov 2013, Universidade do Algarve, Faro, Portugal
- 3rd Conference on Conservation Physiology of Marine Fishes, 28-30 October 2013, Real Marina Hotel, Olhão, Portugal
- 5th Conference of the Iberian Association for Comparative Endocrinology, 8-10 September 2005, Universidade do Algarve, Faro, Portugal
- 20th Conference of European Comparative Endocrinologists” 5-9 September 2000, Universidade do Algarve, Faro, Portugal

- LANGUAGE SKILLS

Language	Conversation	Reading	Writing
Portuguese (Native)	Excellent	Excellent	Excellent
English	Very Good	Very Good	Very Good
Spanish	Very Good	Very Good	Good
French	Good	Very Good	Sufficient

B. Publications

- BOOK CHAPTERS

1. Flik G., Varsamos S., **Guerreiro P. M.**, Fuentes J. and Fenwick J. (2001). Drinking in very young fish, In: Osmoregulation and Drinking in Vertebrates, N. Hazon and G. Flik (Editors), BIOS Scientific Publishers Ltd, UK
2. **Guerreiro P.M.** and Fuentes J. (2007). Control of calcium balance in fish, In: Fish Osmoregulation, Eds. B. Baldisserotto, J. M. Mancera & B. G. Kapoor. Science Publisher, Inc., USA
3. Canário A. V.M., Fuentes J., **Guerreiro P. M.** and Power D. M. (2007) Parathyroid Hormone and related Peptides in Fish: From Sequence to Function, In: Novel Aspects of PTHrP Physiopathology Eds. C. Luparello, Nova Science Publishers, Inc.
4. Power D.M., **Guerreiro, P.M.**, Hubbard, P.C., Huertas, M., Morgado I. and Fuentes, J. (2010) Endocrinology applied to aquaculture of finfish, In: Recent Advances in Aquaculture Research, Ed. G Koumoundouros Transworld Research Network.
5. Suarez-Bregua P., Cal Delgado, L., **Guerreiro, P.M.**, Rotllant, J. (2018) Novel Aspects of Phosphate Endocrine Control: A Key Element for the Long-Term Sustainability of Finfish Aquaculture, In: Emerging Issues in Fish Larvae Research. Ed. M. Yufera (2018). Springer Nature, Switzerland. DOI 10.1007/978-3-319-73244-2_9

- ARTICLES IN PEER-REVIEWED JOURNALS

- Marçalo, A; **Guerreiro PM**, Bentes L, Rangel M, Monteiro P, Oliveira F, Afonso CML, Pousão-Ferreira P, Benoit HP, Breen M, Erzini K, Gonçalves JMS (2018) Effects of different slipping methods on the mortality of sardine, *Sardina pilchardus*, after purse-seine capture off the Portuguese Southern coast (Algarve) PLOS One, *In press*
- Carecho J, Baduy F, **Guerreiro PM**, Saraiva JL, Ribeiro F, Veríssimo, A (2018) Taxonomic re-evaluation of the non-native cichlid in Portuguese drainages. *FishMed In press*
- Baduy, F, **Guerreiro PM**, Canario, AVM, Saraiva, JL (2017) Social organization and endocrine profiles of *Australoheros facetus*, an exotic freshwater fish in southern Portugal *Acta Ethologica*, 20:263-277
- Hubbard, P. C.; Baduy, F.; Saraiva J.L., **Guerreiro P.M.** and Canario, AVM (2017) High olfactory sensitivity to conspecific intestinal fluid in the chameleon cichlid *Australoheros facetus*: could faeces signal dominance? *Journal of Fish Biology* Pages: DOI: 10.1111/jfb.13297
- Suarez-Bregua, P; Torres-Nunez, E; Saxena, A; **Guerreiro, PM**; Braasch, I; Prober, DA; Moran, P; Cerda-Reverter, JM; Du, SJ; Adrio, F; Power, DM; Canario, AVM; Postlethwait, JH; Bronner, ME; Canestro, C; Rotllant, J (2017) Pth4, an ancient parathyroid hormone lost in eutherian mammals, reveals a new brain-to-bone signaling pathway. *Faseb Journal* Volume: 31 Issue: 2 Pages: 569-583
- McKenzie DJ, Axelsson M, Chabot D, Claireaux G, Cooke SJ, Corner RA, De Boeck G, Domenici P, **Guerreiro PM**, Hamer B, Jørgensen C, Killen SS, Lefevre S, Marras S, Michaelidis B, Nilsson GE, Peck MA, Perez-Ruzafa A, Rijnsdorp AD, Shiels HA, Steffensen JF, Svendsen JC, Svendsen MB, Teal LR, van der Meer J, Wang T, Wilson JM, Wilson RW, Metcalfe JD. (2016) Conservation physiology of marine fishes: state of the art and prospects for policy. *Conserv Physiol.* 4(1):cow046.
- Schein V, Kucharski LC, **Guerreiro PM**, Martins TL, Morgado I, Power DM, Canario AVM, da Silva RSM. Stanniocalcin 1 effects on the renal gluconeogenesis pathway in rat and fish. *Molecular and Cellular Endocrinology.* 2015 414:1-8.

- Martins RS, Pinto PI, **Guerreiro PM**, Zanuy S, Carrillo M, Canário AV. Novel galanin receptors in teleost fish: Identification, expression and regulation by sex steroids *Gen Comp Endocrinol.* 2014. 205:109–120
- **Guerreiro PM**, Bataille AM, Parker SL, Renfro JL. Active removal of inorganic phosphate from cerebrospinal fluid by the choroid plexus. *Am J Physiol Renal Physiol.* 2014 306(11):F1275-84.
- Correia S, Oliveira PF, **Guerreiro PM**, Lopes G, Alves MG, Canário AV, Cavaco JE, Socorro S. Sperm parameters and epididymis function in transgenic rats overexpressing the Ca²⁺-binding protein regucalcin: a hidden role for Ca²⁺ in sperm maturation? *Mol Hum Reprod.* 2013 19(9): 581-589
- **Guerreiro PM**, Costa, R., Power, DM. Dynamics of scale regeneration in seawater- and brackish water-acclimated sea bass, *Dicentrarchus labrax*. *Fish Physiol Biochem.* 2013 39(4): 917-930
- Vieira FA, Pinto PI, **Guerreiro PM**, Power DM. Divergent responsiveness of the dentary and vertebral bone to a selective estrogen-receptor modulator (SERM) in the teleost *Sparus auratus*. *Gen Comp Endocrinol.* 2012 Dec 1;179(3):421-7
- Bevelander GS, **Guerreiro PM**, Spanings T, Flik G. Differential expression of PTHrP and its receptor in pituitary gland and gills in estradiol-treated gilthead sea bream (*Sparus auratus*, L.). *Gen Comp Endocrinol.* 2011 Aug 1;173(1):199-204.
- **Guerreiro PM**, Canario AV, Power DM, Renfro JL. Piscine PTHrP regulation of calcium and phosphate transport in winter flounder renal proximal tubule primary cultures. *Am J Physiol Regul Integr Comp Physiol.* 2010 Aug;299(2):R603-11.
- Fuentes J, Brinca L, **Guerreiro PM**, Power DM. PRL and GH synthesis and release from the sea bream (*Sparus auratus* L.) pituitary gland in vitro in response to osmotic challenge. *Gen Comp Endocrinol.* 2010 Aug 1;168(1):95-102.
- Abbink W., Kulczykowska E., Kalamarz H., **Guerreiro P.M.** and Flik G. (2008) Melatonin synthesis under calcium constraint in gilthead sea bream (*Sparus auratus* L.) *Gen. Comp. Endocrinol.* 155:94-100
- Fuentes J, **Guerreiro PM**, T Modesto, J Rotllant, AVM Canario, DM Power (2007) A PTH/PTHrP receptor antagonist blocks the hypercalcemic response to estradiol-17 β . *Am J Physiol Regulatory Integrative Comp Physiol* 293:R956-960
- Fuentes, J., Haond, C., **Guerreiro, P. M.**, Silva, N., Power, D. M., Canario, A. V. M. Regulation of calcium balance in the sturgeon *Acipenser naccarii*: a role for PTHrP, *Am. J. Physiol. Reg. Integr. Comp. Physiol.* 293:R884-893
- Abbink W., Hang X. M., **Guerreiro P. M.**, Spanings F. A. T., Ross H. A., Canario A. V. M. and Flik G. (2007) PTHrP and calcium regulation in vitamin D-deficient sea bream (*Sparus auratus*) *J. Endocrinol.* 193: 473-480
- **Guerreiro P.M.**, Renfro J.L., Power D.M. and Canario A.V.M. (2007). The parathyroid hormone family of peptides: structure, tissue distribution, regulation and potential functional roles in calcium and phosphate balance in fish. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 292: R679-R696
- Abbink,W., Bevelander, G. S., Hang X., Lu,W.,**Guerreiro, P.M.**, Spanings T., Canario, A.V.M. and Flik, G. (2006) PTHrP regulation and calcium balance in sea bream (*Sparus auratus* L.) under calcium constraint. *J Exp Biol* 209: 3550-3557
- **Guerreiro, P.M.**, Rotllant, J., Fuentes, J., Power, D.M. and Canario A.V.M. Cortisol and parathyroid hormone-related peptide are reciprocally modulated by negative feedback. *Gen. Comp. Endocrinol.* 148(2):227-235
- Canario, A.V.M., Rotllant, J., Fuentes, J., **Guerreiro, P.M.**, Teodósio, H.R., Power, D.M. and Clark, M.S. Novel bioactive parathyroid hormone and related peptides in teleost fish. *FEBS Letters* 580(1): 291-299.
- Rotllant, J., **Guerreiro, P.M.**, Fernandes, H., Redruello, B., Apolónia, L., Anjos, L., Canario, A.V.M. and Power, D.M. (2005) Ligand binding and signalling pathways of PTH receptors in sea bream (*Sparus auratus*) enterocytes. *Cell and Tissue Res.* 323(2): 333-341.
- Rotllant, J., Redruello, B., **Guerreiro, P.M.**, Fernandes, H., Canario, A.V.M. and Power, D.M. (2005) Calcium mobilization from fish scales is mediated by parathyroid hormone related protein via the parathyroid hormone type 1 receptor. *Regul Pept.* 132(1-3):33-40.
- Anjos, L., Rotllant, J., **Guerreiro, P.M.**, Hang, X., Canario, A.V.M., Balment, R. and Power, D.M. (2005) Production and characterisation of gilthead sea bream (*Sparus auratus*) recombinant parathyroid hormone related protein. *Gen. Comp. Endocrinol.* 143(1):57-65.
- Laiz-Carrion, R., **Guerreiro, P.M.**, Fuentes, J., Canario, A.V.M., Martin del Rio, M.P. and Mancera, J.M. (2005) Branchial Osmoregulatory Response to Salinity in the Gilthead Sea Bream, *Sparus auratus*, *J. Exp. Zool.*, 303A (7): 563 – 576.
- Redruello, B., Rotllant, J., **Guerreiro, P.M.**, Anjos, L., Esteveao, D.M., Power, D.M., and Canario, A.V.M. (2005) PTHrP Suppresses Osteonectin Expression in Scales from the Seawater Teleost *Sparus auratus*. *J. Bone Min. Res.*, 20(4):682-692.
- Rotllant, J., **Guerreiro, P.M.**, Anjos, L., Redruello, B., Canario, A.V.M., and Power, D.M. (2005) Stimulation of cortisol release by the N-terminus of teleost parathyroid hormone-related protein: characterization of ligand determinants for receptor signalling in interrenal cells in vitro. *Endocrinology*, 146(1):71–76.
- **Guerreiro, P.M.**, J. Fuentes, G. Flik, J. Rotllant, D. M. Power and A.V. M. Canario (2004) Water calcium concentration modifies whole-body calcium uptake in sea bream larvae during short-term adaptation to altered salinities. *J. Exp. Biol.* 207 (4): 645-653.

- Rotllant, J., G. Worthington, J. Fuentes, **Guerreiro**, P.M., K. Teitsma, P.M. Ingleton, R.J. Balment, A.V.M. Canario and D.M. Power (2003) Determination of tissue and plasma concentrations of PTHrP in fish: development and validation of a radioimmunoassay using a teleost 1-34 N-terminal peptide. *Gen. Comp. Endocrinol.* 133 (1): 146-153.
- Flanagan, J. A., L. A. Bendell, P. M. **Guerreiro**, M. S. Clark, D. M. Power, A. V. M. Canario and P. M. Ingleton (2002). Cloning and tissue distribution of the calcium-sensing receptor in the sea bream (*Sparus aurata*). *Gen. Comp. Endocrinol.* 127: 117-127.
- **Guerreiro**, P.M., J. Fuentes, A.V.M. Canario, and D.M. Power (2002) Calcium balance in sea bream juveniles (*Sparus aurata*): the effect of estradiol-17. *J. Endocrinol.* 173: 377-385.
- **Guerreiro**, P.M., J. Fuentes, D.M. Power, P.M. Ingleton, G. Flik and A.V.M. Canario (2001), Parathyroid hormone-related protein: a calcium regulatory factor in sea bream (*Sparus aurata* L.) larvae. *Am. J. Physiol. Reg. Integr. Comp. Physiol.* 281: R855-R860.
- Flanagan, J.A., D.M. Power, L.A. Bendell, P.M. **Guerreiro**, J.Fuentes, M.S. Clark, A.V.M. Canario, J.A. Danks, B.L. Brown and P.M. Ingleton (2000) Cloning of the cDNA for sea bream (*Sparus aurata*) parathyroid hormone-related protein. *Gen. Comp. Endocrinol.* 118: 373-382.
- Nowell, M. A., L. Llewellyn, V. P. Ramsurn, T. Wigham, D. M. Power, P. M. **Guerreiro** and G. E. Sweeney. (2000) Cloning and Expression of an Elongation Factor-1 α in Sea Bream (*Sparus aurata*) Larvae and Adult Tissue. *Marine Biotechnol.* 2: 173-179.

- PUBLICATIONS IN CONFERENCE PROCEEDINGS AND PUBLISHED ABSTRACTS

- Baduy F, Soares J, Silva M, Canário AVM, Saraiva J, **Guerreiro PM** (2016) Critical thermal maximum and minimum in *Australoheros facetus*, a neotropical invader in the Iberian Peninsula. *FiSHMED Fishes in Mediterranean Environments 2016.012:3p.*
- Baduy F, Saraiva JL, Vargas M, Silva M, Soares J, Canario AVM, **Guerreiro PM**, (2016). Plastic physiology, social behavior and endocrine profiles of an invasive cichlid in southern Portugal. pp 91-94 In *Advances in Comparative Endocrinology*, vol 8, Universitat Jaume I, Castellon, Spain 232p
- Alves A, Silva SC, Canario AVM, Power DM, Fuentes J, **Guerreiro PM** (2016). Dietary Pi restriction in sea bass and modulation of phosphorus and calcium intestinal absorption. pp 209-211 In *Advances in Comparative Endocrinology*, vol 8, Universitat Jaume I, Castellon, Spain 232p
- Silva SC, Alves, A, Canario AVM, Power DM, **Guerreiro PM** (2016). Expression of FGF23/Klotho system in the sea bass: tissue distribution and regulation by dietary Pi pp 212-214 In *Advances in Comparative Endocrinology*, vol 8, Universitat Jaume I, Castellon, Spain 232p
- Baduy F, **Guerreiro PM**, Vargas M, Canario AV and Saraiva JL (2015). Hierarchy formation and hormonal profiles in *Australoheros facetus*, an invasive freshwater fish in Portugal.. *Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology.* doi: 10.3389/conf.FMARS.2015.03.00064
- **Guerreiro PM**, Silva SC, Alves A, Becker AG, Power DM, Canario AV, Parker S and Renfro JL (2015). Krogh's principle or a multiple fish model approach to phosphate balance: is there a centrally regulated intestinal-skeletal-renal axis?. *Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology.* doi: 10.3389/conf.FMARS.2015.03.00027
- **Guerreiro PM**, Louro B, Alves A, Couto E, Cruz B, Eufrazio A, Deloffre L, Wilson JM and Canario AV (2015). Antarctic fish in a changing world: metabolic, osmoregulatory and endocrine stress response. *Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology.* doi: 10.3389/conf.FMARS.2015.03.00013
- Suarez-Bregua P, Torres-Nuñez E, Prober D, Cerdá-Reverter J, **Guerreiro PM**, Du S, Cañestro C and Rotllant J (2014). Characterization of a new fish-derived bioactive neuropeptide involved in bone remodelling. Its physiological function and therapeutic potential. *Front. Mar. Sci. Conference Abstract: IMMR | International Meeting on Marine Research 2014.* doi: 10.3389/conf.FMARS.2014.02.00057
- **Guerreiro, P.M.**, Couto, E., Louro, B., **Guerreiro E.M.**, Deloffre, L. and Canario, AVM (2014) The stress endocrine response and osmoregulation in Antarctic Fish *Notothenia rossii* and *Notothenia coriiceps* exposed to thermal and osmotic challenges pp 72-76 In *Avances en Endocrinología Comparada*, vol 7, Universidad de Barcelona, Barcelona, Spain 168p
- Young RK., **Guerreiro PM.**, Renfro JL, Perry D, Taylor RJ and Villalobos ARA (2011) Accumulation of zinc by choroid plexus of spiny dogfish shark (*Squalus acanthias*). *Bulletin MDIBL*, 50: p.141
- **Guerreiro**, P.M., A.M. Bataille, Renfro, J.L. (2010) PiT-like transporters are associated with inorganic phosphate transport by choroid plexus of spiny dogfish shark (*Squalus acanthias*). *Bulletin MDIBL*, 49: p.5.
- **Guerreiro**, P.M., Villalobos, A.R.A., Renfro, J.L. (2008) Active transepithelial transport of inorganic phosphate by choroid plexus of spiny dogfish shark (*Squalus acanthias*). *Bulletin MDIBL*, 47: p.28.
- **Guerreiro**, P.M., Laiz-Carrión, R., Haond, C., Modesto, T., Fuentes, J., Mancera, J.M., Canario, A.V.M. (2007) Branchial osmoregulatory response to salinity challenge in the Lusitanian toadfish. *Comp Biochem Physiol A – Mol. Integr. Physiol* 148: s73-s74 suppl. 1
- Barimo, J., Modesto, T., Soares, S., **Guerreiro**, P.M., Wood, C.M., Walsh, P.J. (2007) Ammonia tolerance and ureotely in the Lusitanian toadfish, *Halobatrachus didactylus*. *Comp Biochem Physiol A – Mol. Integr. Physiol* 148: s49-s49 suppl. 1

- P. M. **Guerreiro**, A.V.M. Canario, D.M. Power and J.L. Renfro (2005) Parathyroid hormone (PTH)-related protein stimulates Pi secretion across fish proximal tubule cells, J. Exp. Zool. A - Comp. Exp. Biol. 305A (2): 130-130
- P.M **Guerreiro**, A.V.M Canario, J. Fuentes, J. Rotllant, B. Redruello, D.M. Power and J. Larry Renfro (2004) Possible actions of PTHrP on calcium and phosphate transport by winter flounder (*Pseudopleuronectes americanus*) renal proximal tubule cells In *Avances en Endocrinología Comparada*, vol 2, Universidad de Cordoba, Cordoba, Spain
- J. Rotllant, P.M. **Guerreiro**, B. Redruello, L. Anjos, H. Fernandes, J. Fuentes, A.V.M. Canario and D.M. Power (2004) Studies on truncated forms of the (1-34) n-terminal peptide of parathyroid hormone-related protein defines regions important for activity In *Avances en Endocrinología Comparada*, vol 2, Universidad de Cordoba, Cordoba, Spain
- H. Fernandes, J. Rotllant, B. Redruello, P.M. **Guerreiro**, A.V.M. Canario and D.M. Power (2004) Characterization of parathyroid hormone-related peptide receptor in fish scales In *Avances en Endocrinología Comparada*, vol 2, Universidad de Cordoba, Cordoba, Spain
- J. Fuentes, J. Figueiredo, P.M. **Guerreiro**, J. Rotllant, A.V.M. Canario and D.M. Power (2004) PTHrP in intestinal calcium transport in the sea bream In *Avances en Endocrinología Comparada*, vol 2, Universidad de Cordoba, Cordoba, Spain
- B. Redruello, J. Rotllant, P.M. **Guerreiro**, L. Anjos, D.M. Estevao, D.M. Power and A.V.M. Canario (2004) Osteonectin from *Sparus auratus*: phylogeny, ontogeny and hormonal regulation In *Avances en Endocrinología Comparada*, vol 2, Universidad de Cordoba, Cordoba, Spain
- P.M. **Guerreiro**, J. Rotllant, A.V.M. Canario, G. Flik, D.M. Power and J. Fuentes. (2001) Parathyroid hormone related protein and calcium transport in the tilapia, *Oreochromis mossambicus*. In *Avances en Endocrinología Comparada*, vol 1, P. Fernández-Llebrez del Rey (Editor), Universidad de Málaga, Vélez-Málaga, Spain.
- J. Rotllant, J. Fuentes, P. M. **Guerreiro**, D. Power and A. Canario. (2001) A possible relationship between corticosteroids and PTHrP in teleost fish: a physiological approach. In *Avances en Endocrinología Comparada*, vol 1, P. Fernández-Llebrez del Rey (Editor), Universidad de Málaga, Vélez-Málaga, Spain.
- P. M. **Guerreiro**, D. M. Power, A. V. M. Canario, P. M. Ingleton, S.E. Wendelaar Bonga, J. Fuentes and G. Flik (1999) Hypocalcemic effects of human parathyroid hormone-related protein in the gilthead sea bream, *Sparus aurata*. In *Recent Developments in Comparative Endocrinology and Neurobiology*, E. Roubos, S.E. Wendelaar Bonga & H. Vaudry (Editors), Shaker Publishers, Maastricht, The Netherlands.
- P.M. **Guerreiro**, J. Fuentes, A.V.M. Canario, D.M. Power, P.M. Ingleton and G. Flik (1999) Parathyroid hormone-related protein: a calcium regulating factor in a marine teleost, *Sparus aurata*. *Journal of Endocrinology* 163: Supplement.
- P.M. **Guerreiro** and D. M. Power, (1996). Ontogeny of growth hormone and prolactin genes expression in early stages of the gilthead sea bream, *Sparus aurata*. *Annales d'Endocrinologie* 57 (Suppl. 4), P152.

-CONFERENCE ABSTRACTS (underline denotes presenting author)

ORAL PRESENTATIONS

- Silva SC, **Guerreiro** PM, Louro, B and Canario AVM. Expression of stress and osmotic related genes in the Antarctic fish *Notothenia rossii* upon thermal and haline challenges. 9th Portuguese Conference on Polar Sciences, Covilhã 6-7 November 2017
- Palma, PSE, Bock C, T.S.; Silva TS, P.M. **Guerreiro** PM, D.M. Power DM, H. Pörtner H, Canário A.V.M.. A metabolomics study of the effects of calcitotropic hormones (STC1 and PTHrP) in liver of European sea bass. 10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 13-15 July 2017, Universidad Vigo, Spain.
- **Guerreiro** PM, Louro B, Silva S, Alves A and Canario AVM. Osmoregulating without filters – *Notothenia rossii* 's renal and branchial responses to salinity and temperature changes. SCAR Biology, 10-14th July 2017, Leuven, Belgium
- **Guerreiro**, PM, Baduy, F, Saraiva, JL, Hubbard PC, Canario AVM. Making a home away from home - plastic physiology, behaviour and hormonal profiles of the invasive chameleon cichlid *Australoheros facetus* in Southern Portugal. Annual Meeting of the Society for Experimental Biology, 3-6 July 2017, Gothenburg, Sweden
- Louro B, **Guerreiro**, PM; A Alves, B Louro, E Couto, JM. Wilson ad A Canário. Transcriptomic responses to thermal and osmoregulatory challenges of Antarctic notothenioid fish: an insight into responses to global change and genome evolution. 8th Portuguese Conference on Polar Sciences, 26-28 October 2016, Lisbon, Portugal
- Sánchez-Nuño S, Silva SC, **Guerreiro** PM, Pinto PIS, Sanahuja I, Ordóñez B, Ibarz A. Modulation of pituitary activity and thyroidal axis of gilthead sea bream throughout thermal fluctuations: effects of dietary energy. 30th Meeting of the New European Society for Comparative Physiology and Biochemistry, 4-7 September 2016, Barcelona, Spain
- **Guerreiro**, PM; A Alves, B Louro, E Couto, JM. Wilson and A Canário. Osmoregulatory and metabolic responses in the antarctic *Notothenia rossii* exposed to altered haline and thermal regimes. Annual Meeting of the Society for Experimental Biology, 4-7 July 2016, Brighton, UK
- **Guerreiro** PM, Sandra Silva, Alexandra Alves, Alessandro G Becker. Physiological and molecular responses to phosphate disturbances in the sea bass, *Dicentrarchus labrax*. 6th Conference of the Iberian Society of Ichthyology, 22-24 June 2016, Murcia, Spain

- Baduy F, Soares D, Teixeira D, Silva M, Soares J, Canário AVM, Saraiva JL, **Guerreiro PM**. Dispersion of the invasive *Australoheros facetus* into upper estuaries may be deterred by salinity-related effects on both physiology and behavior. 6th Conference of the Iberian Society of Ichthyology, 22-24 June 2016, Murcia, Spain
- **Guerreiro PM**, Alves A, Louro B, Wilson JM, Eufrazio A and Canario AVM. The renal responses of *Notothenia rossi*: what makes it tinkle? 7th Portuguese Conference on Polar Sciences, 28-29 October 2015, Evora, Portugal
- Silva FBV, **Guerreiro PM**, Vargas M, Canario AVM and Saraiva JL. Strangers in a strange land: reproduction, social structure and endocrine profiles of the chanchito *Australoheros facetus*, an invasive cichlid in southern Portugal XII Congresso da Sociedade Portuguesa de Etologia, 9-10 Outubro ISPA, Lisboa, Portugal
- Silva FBV, Saraiva JL, Vargas M, Silva M, Soares J, Canario AVM and **Guerreiro, P. M.** Plastic physiology, social behaviour and endocrine profiles in an invasive cichlid in southern Portugal. "10^o Congreso de la Asociación Ibérica de Endocrinología Comparada", 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- **Guerreiro, P.M.**, Silva S, Alves A, Becker AG, Power DM, Canário AVM, Parker S and Renfro JL. Krogh's principle or a multiple fish model approach to phosphate balance: is there a centrally regulated intestinal-skeletal-renal axis? XV European Congress of Ichthyology, 7-11 September 2015, Porto, Portugal.
- **Guerreiro, P.M.**, Louro B, Couto E, Guerreiro EM, Canario AVM. The stress endocrine axis of *Notothenia rossi* and *N. coriiceps* in response to environmental changes, 6th Portuguese Conference on Polar Sciences, October 2014, Oporto, Portugal
- **Guerreiro, P.M.**, Bataille, A.M., Parker, S. and Renfro, J.L. Phosphate balance in the choroid plexus of sharks *S. acanthias* and *M. canis*: a role for PiT transporters and PTHrP in a centrally regulated renal-gastrointestinal axis? 11th International Congress on the Biology of Fish, August 2014, Edinburgh, UK
- Suarez-Bregua P, Torres-Nuñez E, Prober D, Cerdá-Reverter J, **Guerreiro PM**, Du S, Cañestro C, Rotllant J. Characterization of a new fish-derived bioactive neuropeptide involved in bone remodelling. Its physiological function and therapeutic potential. IMMR 2014 - International Meeting on Marine Research 10-11 July 2014, Peniche, Portugal
- Silva FB, Saraiva JL, Canario AV, **Guerreiro PM**. Physiological potential for the invasive freshwater cichlid *Australoheros facetus* to inhabit brackish waters of the Guadiana River basin (Southern Portugal). V Jornadas Ibéricas de Ictiología, SIBIC. 24-27 Junho, 2014. Lisboa, Portugal.
- **Guerreiro PM**, Couto E, Louro B, Guerreiro EM, Deloffre L, Canario AVM. Thermal and osmotic challenges and the stress endocrine axis of Antarctic fishes: Adaptation in a global climate change context "9^o Congreso de la Asociación Ibérica de Endocrinología Comparada", 13-14 July 2013, Universidad Barcelona, Spain.
- Torres-Nuñez, R; Ceinos, RM; Suarez-Bregua, P; Figueras, A; Prober, D; Cerdá-Reverter, JM; **Guerreiro, PM**; Cardoso, JC; Canario, AVM; Power, DM; Du, SJ; Cañestro, C; Rotllant, J. Identification and characterization of a new neural brain-to-bone pathway regulating bone mass accrual (2013) 3rd Conference "Interdisciplinary Approaches in Fish Skeletal Biology", April 22-24, Tavira, Portugal
- **Guerreiro, P.M.**, E. Couto, E. M. Guerreiro, L. Deloffre, M. S. Clark and A. V.M. Canário. Adaptive responses of Antarctic fish to environmental temperature and salinity. 4th Portuguese Conference on Polar Science, 2012, Lisbon, Portugal
- Huertas, M., **Guerreiro, P.M.**, Santos, S., Canario, A.V.M and Hubbard, P.C. Is olfaction an osmoregulatory sense in the european eel? 10th International Congress on the Biology of Fish, 2012, Madison, WI, USA
- **Guerreiro, P.M.**, Bataille, A.M., Power, D.M., Canário, A.V.M. and J.L. Renfro. Role of PiT transporters in phosphate flux across the choroid plexus and regulation by pthrp in the shark (*squalus acanthias*) "8^o Congreso de la Asociación Ibérica de Endocrinología Comparada", 4-7 September 2011, Universidad Complutende de Madrid, Spain.
- P.M. Guerreiro, S. Sangiao-Alvarellos, J. Fuentes, J.L. Renfro, D.M. Power and A.V.M. Canario. Parathyroid Hormone-related protein alters in vitro and in vivo renal function and ion transport in fish. 2007 Annual Main Meeting of the Society for Experimental Biology, Glasgow, UK.
- Fuentes J., Silva A., **Guerreiro P.M.**, Haond C., Silva N., Power D.M. and Canario A.V.M. (2006) Calcium balance in sturgeon (*Acipenser naccarii*): involvement of PTHrP. 23rd Conference of European Comparative Endocrinologists, Manchester, UK
- Canario A.V.M., **Guerreiro P.M.**, Silva N., Power D.M., Somoza G.A. and Moncaut, N. (2006) The gonadotrophin-releasing hormone receptors: a factor in fish osmoregulation? 23rd Conference of European Comparative Endocrinologists, Manchester, UK
- A.V.M. Canario, J., Rotllant, P. M. **Guerreiro**, J. Fuentes, B. Redruello, D. M. Power, M. S. Clark (2004) Several parathyroid hormone and related proteins in teleost fish: how functional are they?, 5th International Symposium on Fish Endocrinology, Castellon, Spain
- A.V.M. Canario, J. Rotllant, P.M. **Guerreiro**, Fuentes, J., Redruello, B., Power, D.M., Clark, M.S. (2004) Novel parathyroid hormone proteins in teleost fish: Molecular characterization and biological activity, 22nd Conference of European Comparative Endocrinologists, Uppsala, Sweden
- P.M. Guerreiro, A.V.M. Canario, J. Fuentes, J. Rotllant, B. Redruello, D.M. Power and J. Larry Renfro (2004) Possible actions of PTHrP on calcium and phosphate transport by winter flounder (*Pseudopleuronectes americanus*) renal proximal tubule cells "4^o Congreso de la Asociación Ibérica de Endocrinología Comparada", 8-10 September 2003, Universidad de Cordoba, Cordoba, Spain.

- J. Rotllant, P.M. **Guerreiro**, B. Redruello, L. Anjos, H. Fernandes, J. Fuentes, A.V.M. Canario and D.M. Power (2004) Studies on truncated forms of the (1-34) n-terminal peptide of parathyroid hormone-related protein defines regions important for activity “4^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 8-10 September 2003, Universidad de Cordoba, Cordoba, Spain.
- B. Redruello, J. Rotllant, P.M. **Guerreiro**, L. Anjos, D.M. Estevao, D.M. Power and A.V.M. Canario (2004) Osteonectin from *Sparus auratus*: phylogeny, ontogeny and hormonal regulation “4^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 8-10 September 2003, Universidad de Cordoba, Cordoba, Spain.
- J. Fuentes, J. Figueiredo, P.M. **Guerreiro**, J. Rotllant, A.V.M. Canario and D.M. Power (2004) PTHrP in intestinal calcium transport in the sea bream “4^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 8-10 September 2003, Universidad de Cordoba, Cordoba, Spain.
- J. Fuentes, P.M. **Guerreiro**, J. Rotllant, A.V.M. Canario, and D.M. Power (2002) Calcitropic action of PTHrP in fish 21st Conference of European Comparative Endocrinologists, University of Bonn, Germany
- P.M. Guerreiro, J. Fuentes, D.M. Power, G. Flik, P.M. Ingleton and A.V.M. Canario. PTHrP and calcium transport in the tilapia *Oreochromis mossambicus*: whole body and cellular aspects. 2002 Annual Main Meeting of the Society for Experimental Biology, University of Swansea, UK.
- J. Rotllant, J. Fuentes, P.M. **Guerreiro**, A.V.M. Canario and D.M. Power The possible relationship between corticosteroids and PTHrP in teleost fish: in vitro and in vivo physiology. 2002 Annual Main Meeting of the Society for Experimental Biology, University of Swansea, UK.
- P.M. Guerreiro, J. Rotllant, A.V.M. Canario, G. Flik, D.M. Power and J. Fuentes. Parathyroid hormone related protein and calcium transport in the tilapia, *Oreochromis mossambicus*. “3^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 6-10 October 2001, Torre del Mar, Málaga, Spain.
- J. Rotllant, J. Fuentes, P. M. **Guerreiro**, D. Power and A. Canario. A possible relationship between corticosteroids and PTHrP in teleost fish. A physiological approach. “3^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 6-10 October 2001, Torre del Mar, Málaga, Spain.
- G. Flik, S. Varsamos, P. M. **Guerreiro**, J. Fuentes and J. Fenwick, 2001. Drinking in very young fish, SEB satellite meeting "Drink or Die", May 25-26, at the 14th International Congress of Comparative Endocrinology (ICCE), "Unity and Diversity" May 26-30, 2001 Sorrento, Italy
- J. Fuentes, P.M. **Guerreiro**, A.V.M. Canario, P.M. Ingleton and D.M. Power, 2000. Parathyroid hormone related protein in calcium balance of juvenile tilapia *Oreochromis mossambicus*, 20th Conference of European Comparative Endocrinologists, Universidade do Algarve, Portugal
- P.M. Guerreiro, J. Fuentes, A.V.M. Canario, P.M. Ingleton, D.M. Power & G. Flik, 2000. Parathyroid hormone-related protein in teleost fish: a role in calcium regulation, 2000 Annual Main Meeting of the Society for Experimental Biology, University of Exeter, UK
- P.M. Guerreiro, J. Fuentes, A.V.M. Canario, D.M. Power, P.M. Ingleton & G. Flik, 1999. Parathyroid hormone-related protein: a calcium regulating factor in a marine teleost, *Sparus aurata*, 190th Meeting of the Society for Endocrinology, Royal College of Physicians, London, UK
- P. M. Guerreiro, J. Fuentes, A. V. M. Canario, P. M. Ingleton, G. Flik & D. M. Power, 1999. PTHrP in the sea bream: tissue expression and actions in calcium metabolism, 2^o Congreso de la Asociación Ibérica de Endocrinología Comparada, Universidad de Murcia, Spain
- P. M. Guerreiro, D. Power, A. V. M. Canario, P.M. Ingleton, G. Flik, S. E. Wendelaar Bonga, & J. Fuentes, 1998. Hypocalcemic effects of human parathyroid hormone-related protein in the gilthead sea bream, *Sparus aurata*. 19th Conference of European Comparative Endocrinologists, University of Nijmegen, The Netherlands

POSTER PRESENTATIONS

- Rangel, M., Campos, A., Marçalo, A., Afonso, C.M.L., Pereira, F., Oliveira, F., Guimarães, M.H., Marques, L. Bentes, L., Castro, M., Torres, M., Gaspar, M.B., Eichert, M., Fonseca, P., **Guerreiro, P.M.**, Monteiro, P., Borges, T.C., Erzini, K. 2018. Ciência, tecnologia e ligação à sociedade para minimizar as capturas indesejadas nas pescarias europeias – Projeto MINOUW (UE H2020 RIA). Primeiro Congresso de Biologia Marinha – uma ponte entre mares. Universidade do Algarve, 24-26 Janeiro, 2018.
- Martinez D, **Guerreiro PM**, Oyarzun R, Sousa CS, Pontigo JO, Canario AVM, Vargas-Chacoff, L. Modulation of iron-related immune genes and oxidative stress in the Antarctic Bullhead, *Notothenia coriiceps* challenged with a bacterial endotoxin. 9th Portuguese Conference on Polar Sciences, Covilhã 6-7 November 2017
- Sousa CS, **Guerreiro PM**, Power DM, Chen L, Canario AVM. Evolution of the immune system in Antarctic notothenioids – a first approach. 9th Portuguese Conference on Polar Sciences, Covilhã 6-7 November 2017
- Vargas-Lagos C, Silva SC, Vargas-Chacoff L, Canario AVM, **Guerreiro PM**. Expression of Heat-shock proteins and metabolic genes in the sub-Antarctic fish *Eleginops maclovinus* exposed to different thermal regimes. 9th Portuguese Conference on Polar Sciences, Covilhã 6-7 November 2017
- **Guerreiro, PM**, Louro, B, Couto E, Silva, S, Alves, A; Canário A.V.M. and others. R U Conphy? Comparative Endocrinology meets Conservation Physiology. 10^o Congreso de la Asociación Ibérica de Endocrinología Comparada”, 13-15 July 2017, Universidad Vigo, Spain.

- **Guerreiro PM**, Louro B, Silva S, Alves A and Canario AVM. The endocrine stress axis responses to temperature in *Notothenia rossii* and *Notothenia coriiceps* – a fish continuum or a singular flock? SCAR Biology, 10-14th July 2017, Leuven, Belgium
- **Guerreiro PM**, Sousa CSV, Silva SC, Louro B, Chen L, Canario AVM. ANTIMUNE- Evolution and constraints of immune response in Antarctic notothenioid fishes 8th Portuguese Conference on Polar Sciences, 26-28 October 2016, Lisbon, Portugal
- **Guerreiro PM**, Silva SC, Louro B, Alves A, Couto E, Canario AVM. Physiological and molecular stress response in *Notothenia rossii*: modulation of HPI sensitivity by environmental challenges 8th Portuguese Conference on Polar Sciences, 26-28 October 2016, Lisbon, Portugal
- **Guerreiro PM**, Silva SC, Canario AVM, Vargas-Chacoff L. Preliminary analysis of the endocrine stress response to temperature in the Sub-Antarctic fish *Eleginops maclovinus* (Eleginopsidae, Notothenioidei). 8th Portuguese Conference on Polar Sciences, 26-28 October 2016, Lisbon, Portugal
- **Guerreiro PM**, Silva SC, Canario AVM, Vargas-Chacoff L. Preliminary analysis of the endocrine stress response to temperature in the Sub-Antarctic fish *Eleginops maclovinus* (Eleginopsidae, Notothenioidei). 8th Portuguese Conference on Polar Sciences, 26-28 October 2016, Lisbon, Portugal
- **Guerreiro PM**, Louro B, Couto E, Alves A, Canario AVM. Physiological and molecular stress response in *Notothenia rossii*: modulation of in vivo and in vitro HPI sensitivity by environmental challenges. XXXIV SCAR Open Science Meeting, 20-30 August 2016, Kuala Lumpur, Malaysia
- Baduy F, Saraiva JL, Canário AVM and **Guerreiro PM**. Will osmotic challenge prevent dispersion of the invasive chlid *Australoheros facetus* in rivers of southern Portugal? Annual Meeting of the Society for Experimental Biology, 4-7 July 2016, Brighthon, UK
- **Guerreiro PM**, Amy M. Bataille AM, Parker S and Renfro JL. The shark choroid plexus and phosphate transport: an extreme model to study the hydromineral balance at the blood-csf interface. Annual Meeting of the Society for Experimental Biology, 4-7 July 2016, Brighthon, UK
- Alves A, Silva SC, Becker AG, Fuentes J and **Guerreiro PM**. The challenge within - response to high and low divalent ion concentration in the sea bass internal milieu. Annual Meeting of the Society for Experimental Biology, 4-7 July 2016, Brighthon, UK
- Baduy F, Soares J, Silva M, Canário AVM, Saraiva JL and **Guerreiro PM**. Thermal endurance mechanisms in *Australoheros facetus*, an invasive freshwater fish in Portugal. 6th Conference of the Iberian Society of Ichthyology, 22-24 June 2016, Murcia, Spain
- **Guerreiro PM**, Louro B, Alves A, Couto E and Canário AVM. Responses of the antarctic fish *Notothenia rossii* and *Notothenia coriiceps* to environmental stress. 6th Conference of the Iberian Society of Ichthyology, 22-24 June 2016, Murcia, Spain
- Jordão V, Modesto T, Alves A and **Guerreiro PM**. High ammonia tolerance and facultative ureotely in the lusitanian toadfish: what is that all about? . 6th Conference of the Iberian Society of Ichthyology, 22-24 June 2016, Murcia, Spain
- Becker AG, **Guerreiro PM**, Palma PF and Canário AVM. Can salinity modulate an interplay between PTHrP and Stanniocalcin through Calcium and the Ca-sensing receptor in the sea bass (*Dicentrarchus labrax*)? “10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- Alves A, Silva SC, Canario AVM, Power DM and **Guerreiro PM**. Dietary Pi restriction in sea bass and hormonal modulation of phosphorus and calcium intestinal absorption. “10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- Silva SC, Alves A, Canario AVM, Power DM and **Guerreiro PM**. Expression of FGF23/KLOTHO system in the sea bass: tissue distribution and regulation by dietary Pi. “10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- **Guerreiro PM**, Alves A, Silva SC, Becker AG, Canario AVM, Wilson JM and Fuentes J. Does the urinary bladder play a role in fish renal function? Some hints from phosphate and calcium transport studies. “10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- Palma PF, **Guerreiro PM**, Power DM and A. V. M. Canario AVM. Regulatory responses to salinity in sea bass. . “10º Congreso de la Asociación Ibérica de Endocrinología Comparada”, 23-25 September 2015, Universidad Jaume I, Castellon, Spain.
- **Guerreiro PM**, Louro B, Alves A, Couto E, Cruz B, Eufrásio A, Deloffre L, Wilson JM and Canario AVM. Antarctic fish in a changing world: metabolic, osmoregulatory and endocrine stress response. XV European Congress of Ichthyology, 7-11 September 2015, Porto, Portugal.
- Silva FBV, **Guerreiro PM**, Vargas M, Canario AVM and Saraiva JL. Hierarchy formation and hormonal profiles in *Australoheros facetus*, an invasive freshwater fish in Portugal. XV European Congress of Ichthyology, 7-11 September 2015, Porto, Portugal.
- Alves A, Silva SC, Becker AG and **Guerreiro PM**. Is there a role for the fish urinary bladder in renal function? Preliminary studies on phosphate balance. Annual Meeting of the Society for Experimental Biology, June-July 2015, Prague, Czech Republic.

- Jordão V, Modesto T, Matos A and **Guerreiro PM**. Ureotely in the Lusitanian Toadfish, *Halobatrachus didactylus* (Bloch & Schneider, 1801). Annual Meeting of the Society for Experimental Biology, June 29-July 3 2015, Prague, Czech Republic.
- Suarez-Bregua, P., Torres-Nuñez, E., Prober, D., Cerdá-Reverter, J.M., **Guerreiro, P.M.**, Du, S.J., Cañestro, C. and Rotllant, J. Potential role in bone regeneration of a novel PTH family member absent in placental mammals. Stem Cell Biology in Regeneration: Mechanistic Insights from the Zebrafish, November 7th, 2014 - Sanford Consortium for Regenerative Medicine. La Jolla, CA, USA
- Lourenço S, Seco J, Azinhaga P, **Guerreiro PM**, Magalhães C, Canário J And Xavier JC (2014) How can you take Polar Marine Science to the World? International Marine Science Communication Conference, 8-9 September, Porto, Portugal
- **Guerreiro, PM**, Louro, L, Couto, E, Guerreiro, EM, Alves A and Canário, AVM_The stress endocrine axis of *Notothenia rossii* and *N. coriiceps* in response to thermal and osmotic challenges, SCAR Biennial Meeting, August 2014, Auckland, New Zealand
- Silva, F.B.V., Saraiva, J.L., Canario, A.V.M., and **Guerreiro, P.M.** Osmoregulatory potential of the chlicid *Australoheros facetus*, an invasive species in southern Portugal streams. 11th International Congress on the Biology of Fish, August 2014, Edinburgh, UK
- **Guerreiro, P.M.**, Louro, B., Cruz, B., Wilson, J.M. and Canario, A.V.M. Renal function in the antarctic *Notothenia rossii* exposed to diluted seawater and elevated temperature. 11th International Congress on the Biology of Fish, August 2014, Edinburgh, UK
- **Guerreiro, P.M.**, Becker, A.G., Louro, B., Couto, E., Silva, S. And Canario, A.V.M. It's getting warm and watery!! The stress endocrine axis of *Notothenia rossii* and *N. coriiceps* in response to environmental challenges. 11th International Congress on the Biology of Fish, August 2014, Edinburgh, UK
- Sánchez, S., Erolđođan, O.T., Özşahinođlu, I., Mumođullarında, P., Sanahuja, I., Millán-Cubillo, A.F., **Guerreiro, P.M.**, Fontanillas, R., Blasco, J., Fernández-Borràs, J., Ibarz, A. Metabolic reorganisation of gilthead sea bream liver during thermal fluctuations: dietary energy effects on cold growth arrest and recovery capacity. 11th International Congress on the Biology of Fish, August 2014, Edinburgh, UK
- **Guerreiro PM**, Couto E, Louro B, Guerreiro EM, Deloffre L, Canario AVM. Endocrine and osmotic response of *Notothenia rossii* to temperature and salinity challenges related to climate change. 5th Portuguese Conference on Polar Science, Universidade do Algarve, 1 November 2013, Faro, Portugal
- **Guerreiro PM**, Couto E, Louro B, Guerreiro EM, Deloffre L, Canario AVM. ¿ADAPTIVE? STRESS RESPONSE IN ANTARCTIC FISH - Thermal and osmotic challenges to *Notothenia rossii* and *N. coriiceps* in a global climate change context. XIth SCAR (Scientific Committee on Antarctic Research) Symposium "Life in Antarctica: Boundaries and Gradients in a Changing Environment", 15-19 July 2013, Barcelona, Spain.
- Ibarz A, Gutierrez D, Rocco R, **Guerreiro PM**, Blasco J, Fernandez-Borras, Fontanillas R & Carbonell T. Dietary lipids and cold-related growth arrest in gilthead seabream *Sparus aurata*: looking for plasma biomarkers. 17th ICCE – International Congress of Comparative Endocrinology, 2013, Barcelona, Spain
- Pinto P, Martins R, **Guerreiro PM**, Zanuy S, Carrillo M & Canario AVM. Galanin receptors in sea bass: identification, expression and regulation by sex steroids. 17th ICCE – International Congress of Comparative Endocrinology, 2013, Barcelona, Spain
- Palma PF, Pinto P, **Guerreiro PM**, Power DM & Canario AVM. The pituitary and the corpuscles of Stannius in a balancing act? "9^o Congreso de la Asociación Ibérica de Endocrinología Comparada", 13-14 July 2013, Universidad Barcelona, Spain.
- **Guerreiro PM**, Couto E, Louro B, Guerreiro EM, Canario AVM. STRESS RESPONSE IN ANTARCTIC FISHES - Thermal and osmotic challenges to *Notothenia rossii* and *N. coriiceps* Annual Meeting of the Society for Experimental Biology, July 2013, Valencia, Spain.
- P. M. Guerreiro, A.M. Bataille, Parker, S., Power, D.M., Canario, A.V.M. and J. L. Renfro (2012) Phosphate flux across choroid plexus in sharks (*S. acanthias* and *M. canis*): It is PiT-mediated but is it regulated by Parathyroid Hormone-related Peptide?, 10th International Congress on the Biology of Fish, July 2012, Madison, WI, USA
- Santos, S., Huertas, M, **Guerreiro, PM** and Hubbard, PC (2012). Effect of acute salinity changes in an osmotic European eel: Is olfaction involved in the osmoregulatory process? Annual Meeting of the Society for Experimental Biology, June 2012, Salzburg, Austria
- **Guerreiro, P.M.**, Costa, R., Caldas E. and D.M. Power (2011) Chronology and Morphometrics of Scale Regeneration in the Sea Bass, *D. labrax*. II Interdisciplinary Approaches in Fish Skeletal Biology, April 2011, Tavira, Portugal
- P. M. Guerreiro, A.M. Bataille and J. L. Renfro (2010) The shark choroid plexus actively removes inorganic phosphate from cerebrospinal fluid, 9th International Congress on the Biology of Fish, July 2010, Autonomic Univ. of Barcelona, Spain
- E. M. Guerreiro, P. M. **Guerreiro**, E. Couto, L. Deloffre, M. S. Clark, A. V. Canário (2010) Response to stress in *Notothenia coriiceps* Richardson, 1844 (Nototheniidae: Teleostei), International Polar Year Oslo Science Conference, June 2010, Oslo, Norway

- P.J. Allen, P.M. **Guerreiro**, A.V.M. Canario, S.J. Peake and W.G. Anderson (2008) Calcium regulation during the reproductive cycle of a wild, freshwater, cartilaginous fish, 6th International Symposium on Fish Endocrinology, June 2008, University of Calgary, Canada.
- P. M. **Guerreiro**, R. Laiz-Carrion, J. Fuentes, D. M. Power and J. M. Mancera (2007) Drinking and ion uptake regulation in sea bream larvae: a role for cortisol? "6º Congreso de la Asociación Ibérica de Endocrinología Comparada", September 2007, Universidad de Cadiz, Spain.
- F. Vieira, E. Caldas, P. M. **Guerreiro** and D. M. Power (2007) Endocrine regulation of bone and cartilage ECM proteins. "6º Congreso de la Asociación Ibérica de Endocrinología Comparada", September 2007, Universidad de Cadiz, Spain.
- E. Caldas, P.M. **Guerreiro**, M.D. Estêvão, D.M Power (2007) Characterization of fish scale regeneration: environmental and endocrine control. "6º Congreso de la Asociación Ibérica de Endocrinología Comparada", September 2007, Universidad de Cadiz, Spain.
- **Guerreiro, P.M.**, Laiz-Carrion, R., Haond, C., Modesto, T., Fuentes, J., Mancera, J.M., Canario, A.V.M. (2007) Branchial osmoregulatory response to salinity challenge in the Lusitanian toadfish. 7th International Congress of Comparative Physiology and Biochemistry, August 2007, Salvador, Bahia, Brazil
- Barimo, J., Modesto, T., Soares, S., **Guerreiro**, P.M., Wood, C.M., Walsh, P.J. (2007) Ammonia tolerance and ureotely in the Lusitanian toadfish, *Halobatrachus didactylus*. 7th International Congress of Comparative Physiology and Biochemistry, August 2007, Salvador, Bahia, Brazil
- P. M. **Guerreiro**, A.V.M. Canario, D.M. Power and J.L. Renfro (2005) Parathyroid hormone (PTH)-related protein stimulates Pi secretion across fish proximal tubule cells, 15th International Congress of Comparative Endocrinology, May 2005, Boston, USA
- L. Anjos, J. Rotllant , P. M. **Guerreiro** , A. V.M. Canario , D. M. Power (2004) Production Of Recombinant Sea Bream (*Sparus auratus*) Parathyroid Hormone Related Protein (PTHrP), 5th International Symposium on Fish Endocrinology, September 2004, Castellon, Spain
- P. M. **Guerreiro**, A. V.M. Canario, D. M. Power, J. L. Renfro (2004) Parathyroid Hormone-Related Protein (PTHrP) Alters Ca²⁺ And Pi Transport Across Fish Renal Cells, 5th International Symposium on Fish Endocrinology, September 2004, Castellon, Spain
- J. Rotllant, H. Fernandes, B. Redruello, P. M. **Guerreiro**, A. V.M. Canario, D. M. Power (2004) Role For PTHrP And PTH1-Receptor Subtype On Calcium Mobilization From Teleost Scales, 5th International Symposium on Fish Endocrinology, September 2004, Castellon, Spain
- P. M. **Guerreiro**, J. Rotllant, T. Modesto, A. V.M. Canario, D. M. Power, J. Fuentes (2004) PTHrP Mediates The Estradiol-Induced Upregulation Of Calcium Balance In Fish, 5th International Symposium on Fish Endocrinology, September 2004, Castellon, Spain
- H. Fernandes, J. Rotllant, B. Redruello, P.M. **Guerreiro**, A.V.M. Canario and D.M. Power (2004) Characterization of parathyroid hormone-related peptide receptor in fish scales "4º Congreso de la Asociación Ibérica de Endocrinología Comparada", September 2003, Universidad de Cordoba, Cordoba, Spain.
- Y.N. Mohammad, J. Fuentes, P.M. **Guerreiro**, and M.S. Clark (2002) Development of microarray resources for the analysis of skeletal mutations in the sea bream (*Sparus aurata*) 21st Conference of European Comparative Endocrinologists, University of Bonn, Germany
- P.M. **Guerreiro**, D.M. Power, A.V.M. Canario and J. Fuentes, 2000. Short-term endocrine response to calcium and phosphate loading in the sea bream, *Sparus aurata*, 20th Conference of European Comparative Endocrinologists, September 2000, Universidade do Algarve, Portugal
- P. M. **Guerreiro**, J. Fuentes, G. Flik, A. V. M. Canario & D. Power, 1999. Salinity challenge and endocrine control of osmoregulation and calcium homeostasis in the sea bream, *Sparus aurata*, 5th International Conference on Comparative Physiology and Biochemistry, University of Calgary, Canada
- P. M. **Guerreiro**, G. Sweeney, T. Wigham, A. V. M. Canario & D. Power, 1997. Retinoic acid induced abnormalities in sea bream (*Sparus aurata* L.) larvae. Third International Symposium on Research for Aquaculture, Fundamental and Applied Aspects, University of Barcelona, Spain
- P. M. **Guerreiro** & D. M. Power, 1996. Ontogeny of growth hormone and prolactin genes expression in early stages of the gilthead sea bream, *Sparus aurata*. 18th Conference of European Comparative Endocrinologists, University of Rouen, France

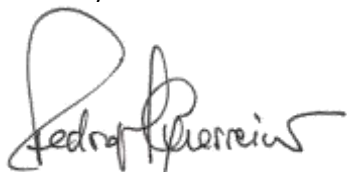
-OTHER PRESENTATIONS

- Invited speaker (Monthly Seminar), Department of Physiology and Neurobiology of the University of Connecticut, USA (October 2004): "PTHrP in fish."
- Invited speaker Membrane Transport Seminar, Mount Desert Island Biological Laboratory, Maine, USA (July 2005): "Novel parathyroid hormone-like peptides and fish calcium/phosphate balance."
- Invited speaker Workshop Welfare of Aquatic Animals, Instituto Superior de Psicologia Aplicada, Lisboa, Portugal (October 2006): "Evaluating the stress response in fish: cortisol and other physiological cues."
- Invited speaker (Zoology Seminar Series), Department of Zoology, University of Gothenburg, Sweden (January 2009): "Fish tales on PTHrP and calcium balance."

- Invited speaker at the 17th National Meeting of Portuguese Biology Students (ENEB, Faro, April 2014): “Fishiology in the lab and the field: how Antarctic fish deal with climate change and other stories.”
- Invited speaker Guerreiro PM, 24/07, “Antarctic fish - Physiological, Molecular and Behavioral Adaptations to the Cold” at 35th Youth Science Meeting, Universidade do Porto, Porto, 21-30 July 2017
- Invited speaker Guerreiro PM, 22/04, “COOL FISH - How do Antarctic Fish live in the cold and will they survive climate change?”, at V AEICBAS Biomedical Congress, Instituto <Ciencias Biomedicas Abel Salazar, Porto, 21-23 Abril 2017
- Invited speaker Guerreiro PM, 26/06, “No-frost fish physiology in the Antarctica – Summer is coming!” at IPMA Seminar Cycle: “Ciência em Português nos Confins do Planeta”, Instituto Portugues do Mar e da Atmosfera, Lisboa, May-June 2017

I declare that all stated above is factual

Sincerely

A handwritten signature in black ink, appearing to read 'Pedro Guerreiro'. The signature is fluid and cursive, with a large initial 'P' and 'G'.

Faro, 10 May 2018