

CURRICULUM VITAE

Short version

PERSONAL INFORMATION



Name	HUGO MANUEL SILVA RIBEIRO
Address	Larissa, Greece
Mobile number	+30 6945940586
e-mail address	hribeiro.researcher@gmail.com
Nationality	Portuguese
Scopus author ID:	36696876300
Researcher ID	E-6752-2016
Personal website	http://hribeiro7.wixsite.com/website

EDUCATION AND TRAINING

PhD

Biomedical Sciences (Biogeochemistry/Environmental Remediation)

From 2009 to July 2013

Institution: Biomedical Sciences Institute, University of Porto

Supervisor: Prof. Adriano Bordalo (contact email: bordalo@icbas.up.pt)

Classification: Approved with Distinction

Master of Science

Environmental Sciences and Technology

From 2007 to 2008

Institution: Faculty of Sciences, University of Porto

Dissertation supervisor: Prof. Maria Teresa Borges (contact email: mtborges@fc.up.pt)

Classification: 18 (0 - 20)

Bachelor of Science

Environmental Sciences and Technology

From 2002 to 2007

Institution: Faculty of Sciences, University of Porto

Classification: 16 (0 - 20)

WORK EXPERIENCE

Project participation

Pipeline for development and commercialization of biological nitrification inhibitors to mitigate GHG emissions from cultivated soils

Researcher from February 2023 – until now

Institution: Department of Biochemistry and Biotechnology, University of Thessaly.

Scientific Coordination: Dimitrios Karpouzas (contact email: dkarpouzas@bio.uth.gr).

OCEAN3R – Reduce pressures, restore and regenerate the NW-Portuguese ocean and waters

Researcher from May 2021 – December 2022

Institution: Hydrobiology Laboratory, Interdisciplinary Centre of Marine and Environmental Research (CIIMAR)

Scientific Coordination: Adriano Bordalo (contact email: bordalo@icbas.up.pt).

BEACHSAFE – Emergent microbial pollutants in bathing waters

Team member from December 2019 – March 2022

Institution: Hydrobiology and Ecology Laboratory, Biomedical Sciences Institute (ICBAS)

Scientific Coordination: Ana Machado (contact email: anaphmachado@gmail.com).

UNNOWN – Undiscovered nitrogen microorganisms for wastewater inoculation

Researcher from December 2018 – March 2021

Institution: Interdisciplinary Centre of Marine and Environmental Research (CIIMAR)

Scientific Coordination: Catarina Teixeira (contact email: teixeira@icbas.up.pt).

CORAL - Sustainable Ocean Exploitation: Tools and Sensors

Researcher from June 2017 – July 2018

Institution: EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Catarina Magalhães (contact email: cmagalhaes@ciimar.up.pt).

SPILLESS - First line response to oil spills based on native microorganisms cooperation

Team Member since January 2017

Institution: EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Ana Paula Mucha (contact email: amucha@ciimar.up.pt).

MARINEYE - A prototype for multitrophic oceanic monitoring

Researcher from January 2016 – April 2017

Institution: EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Catarina Magalhães.

BioMar.PT – Learning to know the marine environment of Portugal

Team Member in 2015

Institution: CIIMAR

Scientific Coordination: Catarina Magalhães

ECORISK - Ecological risk assessment of oils and hazardous and noxious substances in the NW Portuguese coast

Collaborator from 2014 to 2015

Institution: CIIMAR

NITROTOX – Interference of Metals and PAHs in Nitrate Removal Biological Processes: Denitrification vs Anammox.

Researcher from January 2014 – February 2015

Institution: EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Catarina Magalhães.

NITROSUL – Novel interactions between marine biogeochemical nitrogen and sulfur cycles: characterization and ecological implications

Researcher from July 2013 - November 2013

Institution: EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Catarina Magalhães.

PHYTOBIO – Phytoremediation and bioremediation of contaminants in salt marshes: plant - microorganisms interactions

Team Member from January 2010 - November 2013

Institution: Hydrobiology laboratory, CIIMAR/ICBAS and EcoBioTec Laboratory, CIIMAR

Scientific Coordination: Ana Paula Mucha.

RACEWAYS – A hyperintensive fish farming concept for lasting competitiveness and superior production

Graduated Fellow from November 2007 - April 2008

Institution: Applied Microbiology laboratory, CIIMAR

Scientific Coordination: Prof. Maria Teresa Borges.

INTERNATIONAL PATENT

DEVICE FOR CAPTURING IN SITU AQUATIC MICROBIOMES

Inventors: Magalhães C, **Ribeiro H**, Dias A, Almeida CMR, Tomasino MP, Guedes M, Ramos S, Dias N, Mucha AP, Carvalho MF, Martins A, Gonçalves M, Silva E, Almeida J.

European Patent Office Application Number: 19827815

United States of America Application Number: 17298428

China Application Number: 201980078261.6

PUBLICATIONS:

PUBLICATIONS IN INTERNATIONAL PEER REVIEWED JOURNALS

16) Ribeiro H, Wijaya IMW, Soares-Santos V, Soedjono ES, Slamet A, Teixeira C, Bordalo AA (2022). Microbial community composition, dynamics, and biogeochemistry during the start-up of a partial nitrification-anammox pathway in an upflow reactor. *Sustainable Environment Research*

15) Santos JP, Sousa AGG, **Ribeiro H**, Magalhães C. (2020) The response of estuarine ammonia-oxidizing communities to constant and fluctuating salinity regimes. *Frontiers in Microbiology* 11: 574815.

14) Sousa AGG, Tomasino MP, Duarte P, Fernández-Méndez M, Assmy P, **Ribeiro H**, Surkont J, Leite R, Leal JP, Torgo L, Magalhães C. (2019) Diversity and composition of pelagic prokaryotic and protist communities in a thin Arctic sea ice regime. *Microbial Ecology* 78, 388 - 408.

13) Ribeiro H, Martins A, Gonçalves M, Guedes M, Tomasino MP, Dias N, Dias A, Mucha AP, Carvalho F, Almeida M, Ramos S, Almeida JM, Silva E, Magalhães C (2019). Development of an autonomous biosampler to capture *in situ* aquatic microbiomes. *PLOS ONE* 14(5): e0216882.

12) Rego A, Raio F, Martins T, **Ribeiro H**, Sousa AGG, Séneca J, Baptista MS, Lee CK, Cary C, Ramos V, Carvalho F, Leão P, Magalhães C (2019). Actinobacteria and Cyanobacteria diversity in terrestrial Antarctic microenvironments using culture-dependent and independent methods. *Frontiers in Microbiology* 10:1018.

11) Ribeiro H, Silva JG, Jesus J, Magalhães C, Dias JM, Danko AS (2019). Biodegradation of Biodiesel and Toluene under Nitrate Reducing Conditions and the Impact on Bacterial Community Structure. *Journal of Soils and Sediments* 19, 439 - 450.

10) Ribeiro H, de Sousa T, Santos J, Sousa AGG, Teixeira C, Salgado P, Monteiro MM, Mucha AP, Almeida CMR, Torgo L, Magalhães C (2018). Potential of dissimilatory nitrate reduction pathways in polycyclic aromatic hydrocarbon degradation. *Chemosphere* 199, 54 - 67.

9) Santos J, Monteiro M, Mendes D, **Ribeiro H**, Borges T, Magalhães C (2018). Salinity impact on ammonia oxidizers activity and amoA expression in estuarine sediments. *Estuarine, Coastal and Shelf Science* 211, 177 – 187.

8) Portugal F, Dias JM, **Ribeiro H**, Magalhães C, Mucha AP, Danko AS (2017). Anaerobic Biodegradation of Ethylic and Methylc Biodiesel and their Impact on Benzene degradation. *CLEAN – Soil, Air, Water*, 45, 1600264.

7) Ribeiro H, Mucha AP, Azevedo I, Salgado P, Teixeira C, Almeida CMR, Joye SB, Magalhães C (2016). Differential effects of crude oil on denitrification and anammox, and the impact on N₂O production. *Environmental Pollution* 216, 391—399.

6) **Ribeiro H**, Almeida CMR, Bordalo AA, Magalhães C, Mucha AP (2015). Salt marsh sediment characteristics as key regulators on the efficiency of hydrocarbons bioremediation by *Juncus maritimus* rhizospheric bacterial community. *Environmental Science and Pollution Research* 22, 450-462.

5) **Ribeiro H**, Mucha AP, Almeida CMR, Bordalo AA (2014). Potential of phytoremediation for the removal of petroleum hydrocarbons in contaminated salt marsh sediments. *Journal of Environmental Management* 137, 10-15.

4) **Ribeiro H**, Mucha, AP, Almeida, CMR, Bordalo, AA (2013). Bacterial community response to petroleum contamination and nutrient addition in sediments from a temperate salt marsh. *Science of the Total Environment* 458-460, 568-576.

3) **Ribeiro H**, Almeida CMR, Mucha AP, Bordalo AA (2013). Influence of different salt marsh plants on hydrocarbon degrading microorganisms abundance throughout a phenological cycle. *International Journal of Phytoremediation* 15, 715-728.

2) **Ribeiro H**, Almeida CMR, Mucha AP, Teixeira C, Bordalo, AA (2013). Influence of natural rhizosediments characteristics on hydrocarbons degradation potential of microorganisms associated to *Juncus maritimus* roots. *International Biodeterioration Biodegradation* 84, 86-96.

1) **Ribeiro H**, Mucha AP, Almeida CMR, Bordalo AA (2011). Hydrocarbon degradation potential of salt marsh plant–microorganisms associations. *Biodegradation* 22, 729-739.

CONFERENCE PEER REVIEWED PUBLICATION

1) Martins A, Dias A, Silva E, Ferreira H, Dias I, Almeida JM, Torgo L, Gonçalves M, Guedes M, Dias N, Jorge P, Mucha AP, Magalhães C, Carvalho MF, **Ribeiro H**, Almeida CMR, Azevedo I, Ramos S, Borges T, Leandro S, Maranhão P, Mouga T, Gamboa R, Lemos M, Santos A, Silva A, Teixeira BF, Bartilotti C, Marques R, Cotrim S (2016). *MarinEye – A tool for marine monitoring*. *Proceedings of the IEEE*. DOI: 10.1109/OCEANSAP.2016.7485624

BOOKS (CHAPTERS)

3) **Ribeiro H**, Santos JP, Sousa AGG, Salgado P, Tomasino MP, Baptista M, Magalhães C (2020). Aerobic ammonia-oxidizing prokaryotic: a perspective of the niche segregation under estuarine salinity gradient. In: De Sousa T (Eds), *Global implications of the Nitrogen cycle*, Cambridge Scholars Publishing, Newcastle, UK.

2) Almeida CMR, Couto N, **Ribeiro H**, Mucha AP, Bordalo A, Basto MC, Vasconcelos MTSD (2015). Salt marsh plants potential for the remediation of hydrocarbons contaminated environments. In: Ansari AA, Gill SS, Newman L, Lanza GR (Eds.), *Phytoremediation: management of environmental contaminants*. Springer publications, New York, 348p.

1) Borges M-T, Santos I, Restivo MT, Mendes JG, **Ribeiro H**, Pereira CM (2009). Solving the challenge of hyperintensive aquaculture: getting the maximum monitoring output from the minimum water input. In: Silva Gomes, JF, Meguid, SA (Eds), Proceedings IRF'2009 – 3rd Integrity, Reliability and Failure, Chapter II: Instrumentation and Engineering Measurement. Faculty of Engineering, University of Porto, INEGI Editions, 676 pp. ISBN 978-972-8826-22-2; CD-ROM, ISBN: 978-972-8826-21-5, Paper Ref: S0206 P0219, 6 p.

COMMUNICATIONS

Hugo Ribeiro has **5 proceedings**, **17 oral** communications and **22 posters** presentations at international scientific conferences.

OTHER CURRICULAR ACTIVITIES

Training courses

2023 - Course on Google Data Analytics. Ongoing

2018 - Practical Workshop on Elixir-Excelerate Workshop on Marine Metagenomics. 7 - 11 of May. IGC - Instituto Gulbenkian de Ciência, Portugal.

2016 - Course on Analysis of Data from Molecular Techniques. 22 - 25 of September. CIIMAR - Interdisciplinary Centre of Marine and Environmental Research - University of Porto, Portugal.

2015 - Course on Analytical techniques in LC-MS / MS in aquatic environment. 22 - 25 of September. CIIMAR - Interdisciplinary Centre of Marine and Environmental Research - Portugal.

2014 - Course on Bioinformatics of microbial genomes and mobile elements: New perspectives and applications. 21 - 25 July (40h). Biology Department, University of Aveiro, Portugal.

International research stays

COST Action ES1302 - European Network on Ecological Functions of Trace Metals in Anaerobic Biotechnologies.

Visiting postdoctoral from April – June 2015

Institution: Microbial Ecophysiology & EcoEngineering Laboratory, National University of Ireland
Scientific Coordination: Prof. Gavin Collins (contact email: gavin.collins@nuigalway.ie).

Other participations

Member of the organizing commission of the 6th Portuguese Polar Conference

Conference: “6th Portuguese Polar Conference” of the Portuguese Polar Program (PROPOLAR).
From 30 – 31 October 2014

Institution: CIIMAR - Rua dos Bragas, 289 - 4050-123 Porto

<http://cienciapolar.weebly.com/vi---reuniatildeo-2014---porto.html>

Teaching Collaborator

2019 - Lecturing on the subject of *Ecosystems Restoration* at the Master's degree in Ecology and Environment program (FCUP), University of Porto

2017 and 2016 - Lecturing on the subject of *Environmental Biotechnology* at the Master's degree in Ecology and Environment (FCUP), University of Porto.

2015 and 2014 - Lecturing on the subject of *Environmental Biotechnology* at the Master's degree in Ecology, Environment and Territory (FCUP) and Bioengineering (FEUP), University of Porto.

2012 - Assistant on *Microbial Ecology* laboratory classes at the Aquatic Sciences first degree program. ICBAS, University of Porto

2012 - Lecturing on the subject of *Biological Oceanography* at the Master's degree in Marine Sciences program. ICBAS, University of Porto

2009 - Lecturing on the subject of *Microbial Ecology* at the Aquatic Sciences first degree program. ICBAS, University of Porto

2008 - Assistant on *Environmental Applied Technology* Laboratory classes at the Master's degree in Biology program. FCUP, University of Porto.

PRIZES AND AWARDS

2018 - *3rd Atlantic Project Award* – Winner (SpilLess team)

Category: Promote entrepreneurship and innovation

Project: "SpilLess"

Awarding Entity: *Atlantic Action Plan*

2018 - *The Best of Technological Portugal Award* - Honorable mention (MarinEye team)

Category: Sustainability

Project: "MarinEye"

Awarding Entity: *Exame Informática*

2006 - *InnovationPoint Award* - 1st prize (1500 €)

Category: Business ideas contest

Project: "EIR of soils: Evaluation, Impact and Remediation of contaminated soils with gasoline".

Awarding Entity: *Innovation Point S.A*