Maria Mafalda Amaral Fonseca de Almeida

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Phone number: (+351) 965687615
Gender: Female
Date of birth: 9 Feb 1999
Nationality: Portuguese

RESEARCH EXPERIENCE:

In the last two years, I have been involved in the Aquaculture Research group (Aquagroup) from Centre of Marine Sciences (CCMAR) performing several techniques associated with four projects based on Senegalese sole (*Solea senegalensis*). In 2020, I presented my project degree related to dominance behaviour in Senegalese sole juveniles and environmental enrichment under Dr Elvira Fatsini and Prof. Elsa Cabrita supervision. This project was inside the framework of REPROF1 and CONDISOLE projects. Currently, I am working in Senegalese sole spermatogonia enrichment, isolation and purification to observe epigenetic modification in fresh and cryopreserved samples. For this purpose, I carry out fish maintenance in Ramalhete station, testes collection and dissociation and techniques for spermatogonia quality assessment, such as, molecular markers, oxidative stress, DNA integrity, viability and DNA methylation. This study is my master thesis and is inside the framework of AQUAEXCEL 3.0 and GERMROS projects from CCMAR.

ACADEMIC BACKGROUND

(2020 – Current) **Master degree on Marine Biology**

University of Algarve, Faculty of Sciences and Technology

Address: Faro, Portugal
Thesis: Spermatogonia cryopreservation and cell enrichment in Senegalese sole

(2017 – 2020) **Bachelor degree on Marine Biology**

University of Algarve, Faculty of Sciences and Technology

Address: Faro, Portugal
Final grade: 15
Final project: The effect of using an environmental enrichment in the dominance behaviour of Senegalese Sole (*Solea Senegalensis*) (18 values of 20)

INTERNATIONAL PEER-REVIEWED PUBLICATIONS

1. Almeida, M., Cabrita, E., Fatsini, E. "The use of an environmental enrichment modulates dominance behaviour and brain mRNA abundance in a flatfish species". AQUACULTURE REPORTS (*Under revision*).

2. Fatsini, E., Tarasco, M., Almeida, M., Félix, F., Cabrita, E. "A new marking and identification method in Senegalese sole (*Solea senegalensis*) with the focus on behavioural trials validated with a novel ImageJ macro MarkerProfiler". PHYSIOLOGY & BEHAVIOR (*Under revision*).

PARTICIPATION IN RESEARCH PROJECTS AS STUDENT

(2022 - Current) – The imprinted characteristics of spermatogonia antioxidant capacity and their role in oxidative stress tolerance - GERMROS (2022-2023) (EXPL/CVT-CVT/0305/2021). **PEX project** funded by **FCT, Portugal**. Principal investigator: **Elvira Fatsini**.

(2022 - Current) - Research infrastructures in aquaculture - AQUAEXEL 3.0. Network. EU project (2020 - 2025). Principal investigator: **Marc Vandeputte** (INRAE, France).

(2019 - 2020) - Asociación de la comunicación química y el estatus social en el lenguado senegalés según las condiciones de cultivo para la producción de reproductores - CONDISOLE (2019 - 2020) Campus de Excelencia Internacional del Mar (**CeiMar**). Principal investigator: **Elvira Fatsini**.

(2019 - 2020) - Condicionamento de indivíduos F1 de linguado senegalês com perspetivas à reprodução em cativeiro - REPROF1 (2017 – 2020) (ref. 16-02-01-FMP-0059). **Programa MAR2020**, Direção Geral das Pescas e Agricultura. Principal investigator: Prof. **Elsa Cabrita**.

ORAL PRESENTATIONS

1. Fatsini, E., **Almeida, M.**, Oliveira, C., Cabrita, E. The use of an environmental enrichment modulates dominance response in Senegalese sole (*Solea senegalensis*). *Congress of the Portuguese Ethological Society 2020* (*SPE2020*). 6 November 2020 (*Online*). Faro, Portugal.

TRAINING ACTIVITIES

Topics of practical work during Master Thesis:

1. Difference in mRNA abundance according to dominance and enriched environment in Senegalese sole juveniles. "Laboratory Methods" proposal for a training period. From 1/01/2021 to 30/05/2021 under Dr Elvira Fatsini supervision.

2. Biochemical responses to temperature and hypoxia in the toadfish *Halobatrachus didactylus*. From 1/10/2021 to 1/12/2021 under Dr Pedro Guerreiro supervision.

VOLUNTEERING

(1 Jul 2020 – 17 Jul 2020) **Fish and tanks maintenance** - Aquário Vasco da Gama. Joined a local aquarium and helped with daily routines which included feeding, cleaning and maintaining several fish.

(1 Jul 2019 – 1 Aug 2019) **Messara Project ARCHELON** - Sea Turtle Protection Society of Greece Joined one of the resident volunteers' teams for 4 weeks

(2015 – 2017) **Animal shelter** União Zoófila de Lisboa

ADDITIONAL RELEVANT INFORMATION

Mother tongue(s): Portuguese
Other language(s): English (LISTENING C2 READING C2 WRITING C1)

Communication skills

Good communication skills acquired through academic and associative activities. Ease of communication in multicultural contexts was acquired mainly in the volunteer projects in which I have participated.

Management and teamwork skills

I am by nature an organized person and easy to coordinate in the execution of different activities/tasks.
I acquired good organizational skills while responsible for presenting projects for ARCHELON to the public.

Computer assisted analysis

Microsoft Office Software: word, excel, power point
Basic statistical analysis: IBM SPSS Statistics 20, R (Statistics), Graph Prism.