

ANNOUNCEMENT OF AN INTERNATIONAL CALL FOR THE SELECTION OF A RESEARCH TECHNICIAN

Internal code: Technician/MAR-FEAMPA/i3S/1311/2025

A call is opened for the position of a Research Technician, for an unfixed term work contract, to carry out technical duties within the project "FLATFARE - Innovation to improve animal welfare in intensive turbot and sole production contexts", with reference MAR-021.1.1-FEAMPA-10035, funded by the Instituto de Financiamento da Agricultura e Pescas IP.

Scientific Area: Biological and veterinary sciences

1. Project summary and work plan

Animal welfare is a matter of utmost importance for the industry, not only due to its increasing relevance in public opinion, marketing, and product acceptance, but above all because of its impact on production efficiency and final product quality. In this regard, animals farmed in aquaculture are now protected under European legislation. Animal welfare requires best practices in terms of farming conditions and fish handling, from reproduction to slaughter.

In recent years, significant scientific developments in the field of health and welfare of two aquaculture species with high potential in Portugal — turbot (Scophthalmus maximus) and Senegalese sole (Solea senegalensis) — have led to major advances in the optimization and implementation of commercial protocols that enhance not only the zootechnical performance of these species but also their welfare under intensive farming conditions.

One of the factors with high impact on animal welfare is the prevention of infectious diseases. These diseases are widely recognized as a critical issue in aquaculture facilities, not only because they are usually associated with suboptimal health and welfare conditions, but also due to the economic losses they can cause. In fact, in recent years, both national and European policies have increasingly promoted farming practices that aim not only to improve disease diagnosis and prevention but also to reduce the use of veterinary drugs, which can cause environmental harm and contribute to the development of antimicrobial resistance (EC, 2021).

In the specific case of Senegalese sole, one of the diseases that most severely limits productivity and profitability in aquaculture due to the economic losses it causes is the infection by *Photobacterium damselae* subsp. *piscicida* (Phdp) (Martínez et al., 2016; Pinto et al., 2018). Although this bacterium affects other marine fish species and licensed vaccines are available for those species, there are currently no effective vaccines for Senegalese sole. The available vaccines for other species have proven ineffective in this one. As a result, numerous outbreaks have been reported, even in vaccinated stocks, leading to the classification of this disease as endemic in Mediterranean aquaculture.

This project aims to develop innovative vaccines for Senegalese sole (including bacterins, recombinant vaccines, and outer membrane vesicle-based vaccines) using









Phdp isolates selected based on genomic sequencing data, or specific antigens derived from those isolates. These vaccines are intended to provide protection against this disease throughout the production cycle. The vaccines will first be tested in short-term experimental trials. Based on the results of these preliminary efficacy tests, the most promising vaccines will be selected for long-term trials. During these trials, blood/organ samples will be collected to monitor the immune response to the different vaccines, with the goal of correlating protection/survival with the immune response elicited.

2. Jury

Chairman: Nuno M. S. dos Santos. Other members: Ana do Vale e Sandra R. Sousa. Substitute: Didier Cabanes e Inês Loureiro.

3. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, research group Fish Immunology & Vaccinology.

4. Professional category and monthly remuneration

Research Technician, €1,745.83, subject to taxes and other mandatory deductions.

5. Obligatory requirements for admission

- a) Master's degree in Biology, Biochemistry, Microbiology, or related fields;
- b) Experience with bacterial cultures and growth curve determination;
 - a. Experience in bacterial genetics and molecular biology, as well as recombinant protein production and purification, will be valued;
- c) License to work with laboratory animals issued by the DGAV for functions A+D, in accordance with Decree-Law No. 113/2013;
- d) Experience in animal experimentation:
 - a. experience with fish will be considered an asset;
- e) Fluent written and spoken communication skills in English;
- f) Contacts of two references;
- g) Immediate availability to start the contract.

6. Evaluation of the applications and publication of the result

Weight of the different curricular valuation criteria

- a) Research experience relevant for this project (90%)
- b) Interview facultative (10%)

If needed, the evaluation panel may invite the most highly ranked candidates (up to 3) for an interview.

The final classification system for candidates is expressed on a scale from 0 to 100. Candidates who are not interviewed will receive a maximum score of 90%.

Candidates are excluded from admission to this call if they do not fill out their application correctly or do not meet the obligatory admission requirements. If in









doubt, the jury may ask any candidate additional documents in support of their statements.

False statements made by candidates will be sanctioned in accordance with the law.

The jury will take minutes of their meetings, which may be consulted by candidates upon request.

The jury deliberates by means of a justified vote according to the evaluation criteria, with no abstentions allowed, and draws up a list of excluded and admitted candidates, ranked by the respective classification after the curricular evaluation. Candidates will be notified of the results by email.

After publication of the ranking list, if their wish to do so, the candidates have 10 working days to submit comments.

In the 90 days following the deadline for submission of applications, the institute Director, who is also responsible for the final decision of hiring, will ratify the decision of the jury.

This call is intended exclusively to fill the indicated position on offer and may be canceled before the final ranking list of candidates is ratified by the Director. Accordingly, the position will no longer be available.

7. Submission of applications

Applications must include all the documents proving that they fulfill the admission requirements, namely:

- a) Copy of certificate or diploma;
- b) Detailed Curriculum Vitae:
- c) Contacts of one-two references;
- d) License to work with laboratory animals issued by the DGAV for functions A+D, in accordance with Decree-Law No. 113/2013;
- e) Other relevant documents for the evaluation of qualification in a related scientific area.

The submission of applications is digital, in pdf format, from November-13 to November-26 2025, in the following link:

 $\frac{https://dozer.i3s.up.pt/applicationmanagement/\#/addapplications/a9c277bb56d93c367ef}{3f7b6a32283b}$

8. Start and duration of the contract

The anticipated start date of the contract is 01 / 01 / 2026 and is subject to budget availability. The expected duration of the contract will be 12 months, eventually extendable.









9. Non-discrimination and equal access policy

i3S actively promotes a policy of non-discrimination and equal access. No applicant shall be privileged, benefited, prejudiced, or deprived of any right or exempted from any duty on the basis of ancestry, age, gender, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs, or trade union membership.

Within the framework of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, i3S adopts the Open, Transparent and Merit-based (OTM-R) principles for the recruitment of researchers, with the aim of conducting fair and transparent recruitment processes, bringing equal opportunities to all candidates.

10. Applicants with disabilities

Under the terms of Decree-Law 29/2001, of February 3, the candidate with a disability is given preference in equal ranking, which takes precedence over any other legal preference. Candidates must declare under oath their degree of disability, the type of disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned decree.





