

## ANNOUNCEMENT FOR THE OPENING OF A SELECTION OF AN INITIATION RESEARCH GRANT– BII\_5-6-7 (3 VACANCIES)

Reference: 2022\_068\_BII\_5-6-7\_VeraoComCiencia

A competition is open for the attribution of 3 initiation research Grants under the Special Support Summer with Science - 2022, for scientific and technological research activities in an R&D unit for the enhancement of scientific and technological capacity and its relationship with higher education and society, financed by the Foundation for Science and Technology, supported by the Portuguese Foundation for Science and Technology, according to the following conditions:

1. **Scientific area:** Molecular biology, Biochemistry;

2. **Admission requirements:** We are looking for candidates enrolled in a higher technical professional course, a degree, an integrated masters or a master, aiming at the beginning of their scientific training through integration in R&D projects to be developed in national institutions, in order to carry out initial R&D activities.

Graduates who are enrolled in courses that do not confer an academic degree, integrated in the educational project of a higher education institution, developed in association or cooperation with one or several R&D units, may also apply.

BIIIs cannot be awarded to anyone who has already benefited from research grants directly or indirectly financed by the FCT, awarded under the terms of the Research Grant Holder Statute, or to whom that, with the conclusion of the grant agreement in question, including the possible renewals, exceeds an accumulated period of one year in that type of grant, followed or interpolated.

3. **Work plan:** The main focus of Cyanobacterial Natural Products lab is to discover novel cyanobacterial natural products and unveil the chemistry and enzymology leading to their production, using different approaches, such as metabolomics and/or genome mining. Production of such diverse metabolites, called secondary metabolites, is the result of a similarly diverse set of biosynthetic enzymes, whose information remains hidden in cyanobacterial genomes. Such enzymes are responsible for assembling the unique structures of these complex molecules, found only in nature. They carry out specialized reactions and can lead to the development of future biocatalysts.

Interestingly, very little is still known about the ecological roles of cyanobacterial secondary metabolites. Aided by biosynthetic knowledge, we seek to understand how these compounds are involved in interactions between cyanobacteria and the surrounding environment. Candidates will onboard a group with multidisciplinary expertise, and will have the opportunity to get acquainted with state-of-the-art analytical and molecular biology techniques, aiding in several ongoing projects.

**Project 1 (2 positions):** The goal of this work will be to develop tools for genetic engineering non-model, marine cyanobacterial strains deposited in the LEGE-Culture Collection available at CIIMAR. Strains will be selected based on their reported capacity for producing natural products of interest. The experimental work will involve several techniques, including (cyano)bacterial cultivation, natural transformation, electroporation, and triparental mating. This work will contribute to establish a Bioengineering approach for improving marine cyanobacterial natural product formation and recovery, essential for future Blue Biotech applications

**Project 2 (1 position):** The selected candidate will work for the project “Lipases from the cyanobacterium LEGE 06099”. As such, the selected candidate is expected to have some theoretical knowledge in one or more of the following areas: cyanobacteria, enzymology, biochemistry, recombinant protein expression and molecular cloning. The hired researcher will be responsible for i) cloning two putative homologous lipases of the strain *Synechocystis* sp. PCC 6803 from the strain LEGE 06099 in *E. coli* with a His-tag, ii) expression and purification of those lipases in *E. coli*, iii) assaying the lipases (if times allows it). This will be part of a project revolving around cyanobacteria fatty acid metabolism.

**4. Legislation and official rules:** Law nº.40/2004, 18th August (Research Fellowship Holder Statute) in its current version; Regulations for Studentships and Fellowships of the Fundação para a Ciência e a Tecnologia, I.P. and CIIMAR Grants Regulation.

**5. Work place:** The work will be carried out at CIIMAR, under supervision of Dr. Paulo Oliveira, Dr. Amaranta Kahn and Dr. Ana Vieira, in the laboratory of Dr. Pedro Leão, integrated in the Research Team “Cyanobacterial Natural Products” at CIIMAR (University of Porto). The laboratory is located at the headquarters of CIIMAR, in the modern Cruise Ship Terminal of the Port of Leixões, in Matosinhos, Porto’s metropolitan area. The selected candidate will work in an international and highly multidisciplinary environment with a strong connection to the Ocean.

**6. Duration of the contract:** Duration of 1 month, under the regime of exclusive dedication:

*Project 1:* one position starting on July; one position starting on the 1<sup>st</sup> of September.

*Project 2:* one position starting on the 1<sup>st</sup> of September.

**7. Monthly salary:** The monthly maintenance allowance is € 486,12, in agreement with the monthly maintenance stipend table of the grants directly attributed by FCT, I.P. within the country [https://www.fct.pt/apoios/bolsas/docs/Tabela de Valores SMM 2022.pdf](https://www.fct.pt/apoios/bolsas/docs/Tabela%20de%20Valores%20SMM%202022.pdf), by bank transfer payment.

**8. Selection methods:** The evaluation will take into account:

- Merit of the academic curriculum and performance (global appreciation considering the BSc degree, its appropriateness to the position as well as the performance of the candidate in such degree)- 50%;

- Relevant experience and qualification for the proposed research area - 50%;

The jury reserves the right to not assign the research grant if none of the candidates meets all requirements and matches the desired profile.

**9. Composition of the jury selection:**

President of the jury: Dr. Paulo Oliveira

Vogal: Dr. Ana Vieira

Vogal: Dr. Amaranta Kahn

**10. Form of advertising/notification of results:** The final results of the evaluation will be sent through a list sorting the candidates according to their attributed mark, by e-mail and available in CIIMAR website; in case of disagreement, the candidates have a 10-working day term in which to contest the decision, if he/she so wishes, as provided for in the Código do Procedimento Administrativo in a preliminary hearing setting. The jury reserves the right to not assign the contract depending on the quality of the applications.

**11. Deadline for application and presentation of applications:** The competition is open from **15/7/2022** until **21/7/2022**. The applications must be formalized, compulsorily, by sending the following documents:

- detailed Curriculum vitae;
- copy of the eligibility certificates or evidence of enrollment in a master/integrated master program or non-academic degree course, if applicable;
- motivation letter;
- contact e-mail address and phone number.

Applications must be sent by email to [rh@ciimar.up.pt](mailto:rh@ciimar.up.pt) with the reference **2022\_068\_BII\_5-6-7\_VeraoComCiencia** on subject. Applications that **do not include all** the elements previously indicated will **not be considered**.

**12. Non-discrimination and equal access policy:** CIIMAR actively promotes a policy of non-discrimination and equal access, by which no candidate can be privileged, can benefit or be put in disadvantage, or can be deprived of any rights or duties based on their social or cultural background, ethnic group or race, age, sex, sexual orientation, marital status, family status, economic status, education, social condition, genetic assets, reduced work capacity, disability, chronic disease, nationality, territory of origin, language, religion, political or ideological beliefs and unionization.

As set forth by the Decree Law 29/2001, the candidate with disability has preference if equally classified, which prevails over any other legal preference. The candidates with disability must declare in their application, on their word of honour, their degree and type of disability, and the means of communication/expression that are to be used in the selection process, as provided by the above mentioned legal diploma.