

## Open Call for a Postdoctoral Research Fellowship

EXTENSION OF THE DEADLINE (14th November, 2023)

The Instituto Gulbenkian de Ciência (IGC) is welcoming applications to a Postdoctoral Research Fellowship (BI-PD) funded by Calouste Gulbenkian Foundation with the following conditions:

1. **Duration:** The fellowship duration, according to the [IGC Research Fellowship Regulation](#) approved by Fundação para a Ciência e Tecnologia, IP (FCT) is 12 months, renewable for up to 3 years. The fellowship contract is expected to start in November 2023, under the exclusiveness regime as required by the Research Fellowship Regulation of FCT.

2. **Subject of Activities:** Deciphering the molecular mechanisms mediating responses to quorum sensing manipulation in the mammalian gut microbiota. We will leverage on previously engineered commensal bacteria available in our group to manipulate the levels of quorum sensing signals directly in the mouse gut. This will enable us to determine how a defined community of gut microbes responds to this manipulation at the levels of gene expression and the metabolites produced by bacteria. These responses will be assessed both in bacterial cultures and in mice colonized with a defined community of microbes, in both the presence and absence of quorum sensing manipulation.

This project aims to identify the regulatory networks involved in the quorum sensing response in key members of the gut microbiota, as well as the group behaviors regulated by quorum sensing in gut microbes. We seek to understand how these processes affect microbiota functions and host physiology. The work will involve bacterial cultures, bacterial genetic manipulation, handling of mice (including the colonization of mice with specific microbes and monitoring of colonization), bacterial transcriptomics, profiling of microbiota composition, and gut metabolomics.

3. **Scientific Guidance:** The selected candidate will join the Bacterial Signalling laboratory (<https://gulbenkian.pt/ciencia/research-groups/kxavier/>), headed by Dr. Karina Xavier.

4. **Academic Profile and Admission Requirements:** Postdoc in life science. We are seeking candidates with PhD degree in Biology/Biochemistry and related areas, preferably, relevant work experience in molecular microbiology and/or mice as model organism, with an interest in studying Host-Microbe Interactions. Applicants with various research backgrounds will be considered, including but not limited to Microbiology and/or Host-Microbe Interactions.

Excellent written and verbal communication ability, in English, is required. Additionally, we will prefer candidates with:

- i) Experience in Molecular Microbiology and/or in Animal Experimentation.
- ii) Ability to work as an effective member of a team as well as independently under general supervision.
- iii) Well-developed communication skills, including experience in writing scientific manuscripts
- iv) Good level of IT skills

According to point 3 of article 3º of the IGC Research Fellowship Regulation, the doctoral degree must have been obtained in the three years prior to the date of submission of the fellowship application.

If the qualification has been conferred by a foreign higher education institution it must be recognized by a Portuguese higher education institution, under the terms of the provisions of article 25.º of Decree-Law n.º 66/2018, of August 16<sup>th</sup> (<https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>), which approves the legal regime of recognition of academic degrees and diplomas of Higher Education, attributed by foreign higher education institutions, and of paragraph e) of n.º 2 of article 4.º of Decree-Law n.º 60/2018, of August 3<sup>rd</sup>, and any formalities established therein must be fulfilled by the date of

the hiring act. The jury reserves the right to invite the candidate ranked immediately after to the position in question when the first ranked candidate is not recognized with the academic degree after the aforementioned formalities have been fulfilled.

**5. For Portuguese taxpayers:** All candidates that where/are currently taxpayers in Portugal are required to present evidence of the fulfillment of their individual obligations towards the Portuguese Tax Authority and Social Security. Failure to comply with this requirement will be considered as a criteria for exclusion from the recruitment process.

**6. Applicable legislation and Regulation:** All candidates must comply with the [IGC Research Fellowship Regulation](#); [Research Fellowship Statutes](#) amended by [Decree n° 123/2019](#) of August 28<sup>th</sup>; [FCT Legislation and Regulations for Fellowships](#) and the [Decree-Law n.º 66/2018](#), of August 16<sup>th</sup> (Legal regime for recognition of academic degrees and diplomas of higher education awarded by foreign higher education institutions).

**7. Subsidy Month Stipend:** 2.000,00€/month according to the table of monthly maintenance allowance amounts set out in Annex I of [IGC Research Fellowship Regulation](#). The payment will be made by bank transfer. The selected candidate may be reimbursed the amount corresponding to the contribution to Voluntary Social Security.

**8. How to submit applications:** Interested candidates should send their applications to [igcpositions@igc.gulbenkian.pt](mailto:igcpositions@igc.gulbenkian.pt) with subject “**Applicant Name\_BI-PD\_Bacterial\_Signalling**”, with a single PDF file named “**Applicant Name\_BI-PD\_Bacterial\_Signalling.pdf**” containing:

- a. Motivation Letter (2 page max);
- b. Curriculum Vitae;
- c. Summary of research achievements (1 page);
- d. Doctoral certificate;
- e. Contacts of 3 references (name, email and phone number);
- f. Other documents relevant for the evaluation of the application.

**9. Methods of Selection and Evaluation:** Applications will be evaluated according to Curriculum and previous experience (60%), motivation letter (20%). References nominated by the candidates shall be consulted, if necessary (10%). In case of a tie, the candidates in this situation will be interviewed (10%) focusing on the research outcomes of the candidate. The decision is made by nominal vote of the selection panel members, in accordance with eligibility and selection criteria, with no abstentions allowed. The final results will be presented on a scale from 0 to 100.

**10. Jury Selection:** Chair: Dr. Karina Xavier, Vowels: Dr. Isabel Gordo, Dr. Vitor Cabral. Substitute: Dr. Tanja Dapa

**11. Form of Advertising / Notification of results:** The assessment results will be sent to all candidates by email. There will be 10 working days for complaints/appeals after the date of publication of the Selection Minute.

**12. Application Period:** From 06/10/2023 until 14/11/2023.

**13. Non-discrimination and equal access policy:** The Instituto Gulbenkian de Ciência of the Calouste Gulbenkian Foundation actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefitted, impaired or deprived of any rights whatsoever, or be exempt of any duties based on ancestry, age, sex, sexual preference, marital status, family and economic conditions, education, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.