



Job advertisement – Reference InnovPP086/2024 Bioinformatics researcher for the Department – 3. Data Management and Risk Analysis Collaborative Laboratory “InnovPlantProtect – Association”

We are looking for a passionate and resourceful PhD holder able to integrate into an organization that is developing innovative products and services to protect crops against pests and diseases.

The work will be done within a multi-disciplinary team comprised of data scientists, statisticians, microbiologists, plant biologists and other bioinformatics researchers.

The ideal candidate must be able to demonstrate a solid background in Bioinformatics, ideally in the field of Host-Microbe Interactions.

Main responsibilities

The candidate shall report directly to the Director of the Department of Data Management and Risk Analysis and will have the following responsibilities:

- Use computational tools to gather and analyse metabarcoding/genomic data in the fields of plant and microorganism population biology and genetics;
- Work closely with wet-lab scientists/agronomists to develop/implement pipelines for microbiome analysis with a strong emphasis on generating clear, actionable reports for stakeholders;
- Work closely with wet-lab scientists to develop/implement tools and pipelines that accelerate the development of new products for biological protection of crops (e.g. microbial genome assembly and comparative genomics);
- Systematically improve, maintain and document in house developed software (following best practices on reproducibility);
- Register, interpret and report results accordingly to InPP’s established procedures, both internally and with external stakeholders.

Specific requirements

- PhD in Bioinformatics, Computational Biology or similar;
- Demonstrated experience working with high-throughput sequencing data (ideally including Oxford Nanopore data);
- Demonstrated experience in the analysis of metabarcoding data but also metagenomics and genomics (genome assembly & annotation; comparative genomics);
- Proficiency with one or more scripting languages (e.g. R, Python) and with bash/unix scripting;





- Expertise in bioinformatics applications for host-microbe interactions, particularly in plant-microbe systems;
- Willing to both learn new techniques and teach/supervise MSc/BSc level researchers;
- Creative and independent, but also able to work as a member of multidisciplinary, project-oriented team, with demonstrated problem-solving skills and flexibility;
- Good written and spoken English (Portuguese is beneficial).

Ideal requirements

- Experience with literate programming (Rmarkdown, Jupyter notebooks) and version control systems (e.g. Git);
- Experience in developing end-to-end bioinformatics pipelines for automated data analysis;
- Experience in the application of Artificial Intelligence to microbiome data;
- Experience with metagenomics and transcriptomics analysis;
- Knowledge of plant-microbe interactions.

InnovPlantProtect is a private non-profit association

InnovPlantProtect aims to create innovation for the protection of crops, seeds and post-harvest products through:

- Development of innovative technologies and knowledge creation, as well as improvement of existing technologies for crop protection;
- Applied scientific research to create novel intellectual property developed technologies in the market, and to develop processes and products;
- Provide technical support to public or private companies and entities, assisting them in the introduction of biotechnological strategies, methods and processes, and in the orientation and implementation of industrial research and development, directed towards the protection of crops, seeds and post-harvest products;
- Collaboration with (inter)national public and/or private institutions, in their areas of activity.

Workplace

The work location will be at the headquarters of InnovPlantProtect in Elvas, situated in INIAV, at the former National Plant Breeding Station.

Salary and contract

A full-time contract, **expected to start on 2nd January 2025** will continue until 31st December, 2025 with a trial period of one month. The contract may be renewed annually for a further one year depending on performance and further financial support. All the activities to be developed will be subject to confidentiality clauses. Gross remuneration will be **€2.046,00/month** (14 months – €28.644,00/year), plus €6 for daily lunch subsidy.





Financial Support

This contract is defined and financed by Investment RE-C05-i02 – “Missão Interface”, referring to Advise n.º 01/C05-i02/2022, within the scope of the Recovery and Resilience Plan “Plano de Recuperação e Resiliência” (PRR).

How to Apply

To the care of the Chief Executive Officer of InnovPlantProtect Collaborative Lab, Professor Pedro Fevereiro (inpp.rh@iplantprotect.pt).

To apply for this position, the following documents should be sent in a single PDF document with the reference “InnovPP086/2024” in the subject:

- Curriculum vitae (CV)**
- Motivation letter**
- Two reference contacts**
- Statement of honour that CV content is accurate.**

(Please note that Degrees obtained in foreign countries need a Portuguese Recognition issued by a Portuguese high degree Institution, according to the [Decree-Law nr. 66/2018](#), of August 16th and the [Ministerial Order nr. 33/2019](#), of January 25th. The presentation of such Recognition is mandatory for contract signature. More information can be obtained in: <https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>)

Deadlines

This **call is open from November 8th to November 28th, 2024**, with a decision expected by December 6th.

General rules of data protection (GDPR)

With the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 26 April 2016, commonly known as the General Data Protection Regulation (GDPR) and in order to ensure a fair and transparent treatment of the holder of the data, InnovPlantProtect informs that by applying for this position you are authorizing InnovPlantProtect to (1) collect and process your personal data deemed necessary and relevant to this recruitment process, (2) to disclose the results of the evaluation in accordance with the legislation in force.