



VACANCY NOTICE – 2023-IPR-S4001-FGIV-022706

FG IV Scientist - Exploratory Research Project

Genetic Modification Finding, Identifying and Labelling Toolkit for European Regulation (GM-FILTER)

Type of contract	Member of the European Commission's contract staff, Function Group IV (article 3b of the Conditions of Employment of Other Servants)
Duration of contract	36 months employment contract for the Exploratory Research Project Genetic Modification Finding, Identifying and Labelling Toolkit for European Regulation (GM-FILTER). Employment contracts for this category of staff can be renewed up to maximum 6 years.
Area	Biotechnology
Place of employment	Ispra (IT)
Indicative basic salary	3877,47 - 5616,29 € (applicable as of 1 st of July 2022) For more detailed information please consult: Working Conditions

WE ARE

The [Joint Research Centre \(JRC\)](#) provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

The current vacancy is in the Food and Feed Compliance Unit of the Directorate for Health and Food of the JRC whose mission is to provide independent scientific evidence for the development, implementation and evaluation of EU policies, mainly in the areas of standardisation, public health, food and feed safety and authenticity.

The Scientific Development Programmes Unit is in charge of the overall JRC Exploratory Research Programme.

The vacancy is within the within the **Exploratory Research Project Genetic Modification Finding, Identifying and Labelling Toolkit for European Regulation (GM-FILTER)**. The JRC Exploratory Research Programme is a strategic initiative characterised by ideas that might lead to novel results and qualitatively enrich current JRC scientific work.

We offer:

An excellent opportunity to acquire experience in working with state-of-the-art machine learning on interesting and complex genomic data, helping to improve health in EU and food safety through high quality and high impact research.

WE PROPOSE



The successful candidate will carry out scientific and technical tasks in accordance with the Exploratory Research Project Genetic Modification Finding, Identifying and Labelling Toolkit for European Regulation (GM-FILTER).

The aim of the GM-FILTER project is to assess the viability of applying advanced artificial intelligence methods to the detection of Genetic Modified Organisms (GMOs) created using Novel Genomic Techniques (NGTs)

The successful candidate will work in a multidisciplinary setting of JRC staff and external collaborators on the (1) Creation of an online infrastructure to organise and process genomic data of different plant organisms; (2) Preparation of an initial baseline of machine-learning techniques to detect GMOs; and (3) Development of novel deep learning methods for the analysis and classifications of GMOs data.

WE LOOK FOR

A Computational Scientist with the following essential qualifications:

- A doctoral diploma (PhD) in Bioinformatics, Computer Science, Engineering, Applied Mathematics or related field, alternatively completed university studies of at least three years attested by a diploma and at least five years professional experience in a field relevant to the position;
- Strong quantitative background with robust statistical and computational skills, ideally with emphasis on machine learning, neural networks, deep learning;
- Proficiency in Python;
- Excellent written and spoken English (C1);
- Ability to work autonomously, and as part of a team;
- Ability to communicate scientific concepts in writing or orally.

In addition, the following competences will be considered as an advantage:

- A good research record track and demonstrated ability to conduct research utilising large data sets, including data retrieval, transformations and analysis;
- Knowledge and use of bioinformatics skills;
- Experience with Transformers Neural Networks;
- Experience with GMOs;
- Work in international research teams and multidisciplinary fields.

HOW TO APPLY

If you are **already on a valid CAST FG IV reserve list**, or you **have already applied to one of the calls below**, you can directly submit your application at <http://recruitment.jrc.ec.europa.eu/?type=AX>.

Interested candidates should provide a CV and cover letter explaining their motivation and aptitude for the vacancy and the described research areas and tasks. In the list of publications accompanying the CV, please highlight your five most relevant publications.

If not, before applying to this position, **you must register** for one of the two following:

- the [Call for Expressions of Interest | EU Careers \(europa.eu\)](https://europa.eu/careers) (CAST Permanent FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or



- the [specialised call for researchers](#) (JRC Call COM/1/2015/GFIV – Research), which is mainly used by the JRC.

Note that each of the calls above has **different minimum eligibility requirements and different selection tests**.

The JRC cultivates a workplace based on respect for other people and the environment, and embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.