



## VACANCY NOTICE – 2023-IPR-S4001-FGIV-022703

### FG IV Scientist - Exploratory Research Project

### Epidemiological Preparedness for Emerging Pathogens and Epidemics (EIPREP)

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| <b>Type of contract</b>        | Member of the European Commission's contract staff, Function Group IV (article 3b of the <a href="#">Conditions of Employment of Other Servants</a> )  |
| <b>Duration of contract</b>    | 36 months employment contract for the Exploratory Research Project Epidemiological Preparedness for Emerging Pathogens and Epidemics (EIPREP). Employment contracts for this category of staff can be renewed up to maximum 6 years. |
| <b>Area</b>                    | Health, Lifestyle and Diseases   |
| <b>Place of employment</b>     | Ispra (IT)   |
| <b>Indicative basic salary</b> | 3877,47 - 5616,29 € (applicable as of 1 <sup>st</sup> of July 2022)<br>For more detailed information please consult: <a href="#">Working Conditions</a>  |

#### **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 Digital Health Unit of the Directorate for Health and Food of the JRC. The unit aims to facilitate digital innovation in health-related topics, such as preparedness and response to emerging health threats using information technology/computer science and mathematical tools.

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

The vacancy is within the **Exploratory Research Project Epidemiological Preparedness for Emerging Pathogens and Epidemics (EIPREP)**. 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 join a scientifically productive team, acquiring experience in working with complex data (epidemiological, environmental, genetic, etc.) on exciting research topics, helping to improve health in the EU through fascinating high impact research.



## **WE PROPOSE**

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The successful candidate will work in a multidisciplinary team at the JRC and external collaborators.

S/he will conduct research on dynamical systems and their application in infectious disease epidemiology and contribute to the dissemination of research outputs through scientific conferences and peer reviewed journals.

S/he will work on the study of environmental and non-environmental factors affecting the health burden from vector-borne and respiratory infections in a globally changing environment.

Embedding new sources of relevant surveillance data, such as earth observation data, combined with routine epidemiological surveillance and environmental data, we use statistical or mathematical modelling, machine and deep learning approaches to develop a framework for the assessment, projection, and mapping the risk of infectious diseases at different geographical and temporal scales to inform public health decisions.

## **WE LOOK FOR**

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A Mathematical/Statistical Epidemiologist with the following essential qualifications:

- A doctoral degree (PhD) in applied mathematics, physics, computer science, mathematical epidemiology, molecular epidemiology or other related field, or alternatively completed university studies of at least three years attested by a diploma combined with at least five years professional experience in a research or analysis field relevant to the position;
- Strong quantitative background with robust mathematical or statistical skills with emphasis on dynamical systems. Experience in application of spatial statistics and agent based modelling will be an additional significant asset;
- Demonstrated ability to conduct research utilising large data sets;
- Proficiency in Python, R or Matlab (at least one);
- Good oral and written communication skills in English (C1);
- The candidate is expected to be creative and work independently and as part of the team;
- Ability to communicate scientific concepts in writing or orally.

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

- Knowledge and experience from the areas of transmission dynamics, immunity, host-vector-pathogen interactions, pathogen evolution;
- Experience working in international collaborative research teams and multidisciplinary fields and environment;
- Solid record of research activities relevant to the post, including publications in international peer-reviewed journals.

## **HOW TO APPLY**

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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 \(europa.eu\)](#) (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.*