



VACANCY NOTICE – 2023-IPR-S4001-FGIV-022711

FG IV Scientist - Exploratory Research Project

Assessing infectious disease outbreaks with Pandemic and Epidemic riSk (APES)

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 Assessing infectious disease outbreaks with Pandemic and Epidemic riSk (APES). Employment contracts for this type of staff can be renewed up to maximum 6 years.
Area	Public Health, Lifestyle and Diseases
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 Exploratory Research Project will integrate expertise from different units of the JRC including the Nature Conservation and Observations' unit; the Forests and Bio-Economy unit and the Economics of Climate Change, Energy and Transport unit.

The units support the European Commission with scientific evidence in the areas of the natural environment, environmental quality, sustainable use of natural resources and climate change. The operational scientific research will take place in the Economics of Climate Change, Energy and Transport unit.

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

The vacancy is within the **Exploratory Research Project Assessing infectious disease outbreaks with Pandemic and Epidemic riSk (APES)**. 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:

A dynamic position for an infectious disease epidemiologist with modelling experience to work on a new JRC Exploratory Research Project, focused on the environmental, climatic,



and socioeconomic drivers of zoonotic spillover events of pathogens with pandemic potential. The overall objective of the project is to contribute to mitigation strategies of future pandemic risk. You will work at the interface between science and policy and support environmental and climate policies with the analysis of epidemiologic data, modelling of big data, the generation of new evidence, and forecasting of global trends. The expected outputs include scientific insights into the emergence of pandemic pathogens, and the potential role of environmental policies reducing pandemic risk.

The project will bring together established and newly available data sources of infectious diseases outbreaks with climatic variables, land use (e.g., forest, agriculture, farming, urbanization), biodiversity, population mobility and other socio-economic determinants. Such spatially and temporally integrated multilayer dataset will be analyzed with advanced statistical methods (AI) in order to reveal historic patterns and explore possible future trajectories. The analysis of these mega drivers will help quantify future pandemic risk in the context of anticipated anthropogenic change.

WE PROPOSE

The successful candidate will carry out scientific tasks in accordance with the Exploratory Research Project Assessing infectious disease outbreaks with Pandemic and Epidemic risk to improve understanding of environmental, climatic, and socio-economic drivers of infectious disease spillover events. will work with a multidisciplinary team of scientists specialising in remote sensing, climatology, geography, environmental sciences, ecosystem modelling and socioeconomics.

S/he will:

- Support the development of a global high-resolution data ensemble that spatially and temporally integrates information from a wide range of public health, environmental, ecological, climate and socio-economic determinants;
- Conduct research to identify the drivers of the emergence of infectious diseases at the global scale;
- Work closely with data scientists and modellers in designing the analytical framework to assess pandemic risks for specific diseases;
- Work and cooperate with scientists in other disciplines relevant for the overall pandemic risks assessment, such as ecologists, epidemiologists, forestry experts, land-use modellers and economists;
- Participate actively in international research fora: contribution to research projects, evaluation of research results, and drafting of scientific publications;
- Provide regular and accurate reports on scientific activities every twelve months and a final report;
- Report to the Project Leader on progress, achievements and potential problems in a timely manner;
- Provide feedback and maintain interactive communication with colleagues;
- Explain the research activities and achievements to third parties, such as scientific communities and the general public;
- Write, disseminate and publish results, among other, in peer-reviewed journals

WE LOOK FOR

A highly motivated scientist with the following essential qualifications:



- A PhD in infectious diseases, epidemiology, biology 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;
- Demonstrated experience in infectious diseases epidemiology and, in particular, in research areas related to emergence of infectious diseases. Familiarity with ecology will be highly valued;
- Experience in quantitative modelling in the area of infectious diseases epidemiology, preferentially with big data;
- Have an excellent record of research activities, including publications in international peer-reviewed journals;
- Present good written and oral communication skills. The selected candidate will be working closely with colleagues in an international environment; teamwork and a spirit of collaboration will be strongly valued;
- Good level of written and spoken English (B2).

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

- Have analytical mindset and solid modelling skills; knowledge of programming software and languages (such as R, Python, Matlab);
- Ability to work in a team and in a multi-cultural environment.

The candidate is expected to be creative and work independently.

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 \(europa.eu\)](http://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.