



VACANCY NOTICE – 2023-IPR-S4001-FGIV-022712

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 vacancy is within the Directorate for Sustainable Resources. The directorate supports the European Commission with scientific evidence in the areas of the natural environment, environmental quality and sustainable use of natural resources. The operational scientific research will take place in the Forests and Bio-Economy unit.

Further information is available at: [JRC science and knowledge activities \(europa.eu\)](#)

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 in an international organization to assess the interplay between forest degradation, deforestation and risks of new Emerging Infectious Diseases (EIDs) worldwide. The researcher will work at the interface between science and policy with the analysis of relevant knowledge and data, the generation of new evidence, the anticipation of evolving



trends and their effective communication. The expected outputs include knowledge and research syntheses, impact assessments and data analyses that will be based on quantitative analysis/modelling. The project will bring together established and newly available data sources, assessed with advanced statistical methods. The goal of the project is to setup a processing chain that will analyse historical trends and, further, will allow drawing conclusions regarding future pandemic risks in the context of anthropogenic environmental changes such as variation in forest cover, forest fragmentation, biodiversity loss, climate change and other socio-economic factors. The analysis will be based on a spatially integrated, high-resolution, multilayer dataset or climate conditions, environmental drivers and spill-over events.

The Exploratory Research Project APES will have potential to inform policymaking about the factors and drivers affecting emergence of EIDs. This includes informing new environmental policy developments and providing additional perspective on existing policy instruments in biodiversity, land-use, and climate change. The project will generate several novel scientific results, including the multilayer geo-located assessment of global patterns of the interaction between human presence, activities, land use, biodiversity, livestock, and disease outbreaks, over time.

WE PROPOSE

The successful candidate will carry out scientific and technical tasks in accordance with the Exploratory Research Project Assessing infectious disease outbreaks with Pandemic and Epidemic riSk (APES) with special emphasis on better understanding the relevance of environmental triggers related to deforestation and forest degradation to spill-over events that may lead to pandemics risks.

S/he will contribute to:

- Support the development of an integrated database: a global high-resolution data ensemble that spatially and temporally integrates information from a wide range of environmental determinants related to forest cover and forest properties, biodiversity, land use, climate, etc.;
- Develop indicators of the interplay between forest and human domains;
- Mapping forest cover and forest properties using a combination of remote sensing retrievals and ground data (optical, SAR and Lidar, NFIs);
- Assess the interplay between forests cover, forest properties and resilience to support the development of adaptation policies in the forest sector;
- 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 doctoral diploma in remote sensing, geography, environmental sciences, ecosystem modelling 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;

- Extensive knowledge and experience in the collection and analysis of large geospatial and/or environmental datasets;
- Have an analytical mindset and solid modelling skills to collect and make sense of large volumes of information, and make decisions or recommendations based on solid analysis;
- Broad knowledge in the area of remote sensing of forests, including experience in the use of optical, SAR and/or Lidar data;
- Strong experience with numerical computing languages (e.g. R, Python) and the use of cloud computing environments (e.g. Google Earth Engine);
- Solid record of research activities including publications in international peer-reviewed journals;
- Good oral and written communication skills in English (B2).

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

- Knowledge of forest ecology and biodiversity science;
- Knowledge of other languages;
- 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.