VACANCY NOTICE FOR A CONTRACT AGENT SELECTION

Job title	**FGIV - Scientist - Exploratory Research Project - Health Biotechnology**
Reference	EC-2026-JRC-529516
Application deadline	**16/01/2027 - 12.00 (noon, Brussels time)**
Directorate-General (full name)	Joint Research Centre (JRC)
Unit	Unit Technologies for Health
Place of assignment	Ispra, Italy
Domain	Science and Research
Contract type and Function Group	Contract Agent 3b FGIV

About us

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

The current vacancy is within Unit Technologies for Health of the Directorate Health and Food, in close collaboration with Unit Systems Toxicology, based in Ispra (Italy).

The mission of the Health and Food Directorate is to protect health and promote wellbeing by ensuring that EU policies and regulations make the best use of scientific knowledge, evidence and standards. The Technologies for Health Unit supports EU health and food policies with safe, sustainable and innovative solutions and technologies, by evaluating available evidence, performing state-of-the-art measurements and generating knowledge for use throughout the policy cycle.

The Systems Toxicology Unit's mission is to protect the health of humans and environment by ensuring that EU policies and regulations exploit advances in safety assessment and increasing understanding of planetary boundaries. The unit also strives for the replacement of animals used in science when better alternatives are available.

The operational scientific research will take place in the Nanobiotechnology laboratory and in the EU Reference Laboratory for alternatives to animal testing (EURL ECVAM).

The Unit Centre for Advanced Studies oversees the overall JRC Exploratory Research Programme.

The vacancy is within the **Exploratory Research Project 'Context-Aware Predictive Testing for Understanding LNP-mRNA Effects' (CAPTURE)**, at the intersection of advanced RNA therapeutics, immunology and human-relevant

testing. 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.

About the role

The jobholder will have the opportunity to:
• Contribute to **CAPTURE**, a JRC Exploratory Research project investigating how biological conditions shape responses to emerging RNA therapeutics.
• Work in an international, multidisciplinary environment, bringing together expertise in immunology, biotechnology, nanotechnology and regulatory science.
• Conduct innovative research using the state-of-the-art laboratory facilities in the Nanobiotechnology laboratory and in the EU Reference Laboratory for alternatives to animal testing.
• Develop scientific expertise through collaboration with leading European researchers, opportunities for scientific publications and participation in international conferences.
• Contribute to research with potential societal and policy impact, supporting more reliable, human-relevant testing of emerging therapies and the future development of non-animal methods in Europe.

The JRC also offers a family-friendly working environment, with online collaboration and occasional travel for conferences/workshops. Please see also Working at the European Commission

The jobholder will carry out scientific and technical tasks in accordance with the Exploratory research project 'Context-Aware Predictive Testing for Understanding LNP-mRNA Effects' (CAPTURE), contributing to the development of human-relevant in vitro models to investigate how biological conditions influence cellular responses to lipid nanoparticledelivered mRNA (LNP-mRNA).

The jobholder will mainly have the following tasks:

• Developing and applying relevant experimental models to investigate immune responses to LNP-mRNA technologies under different biological conditions;
• Assessing biological responses and underlying mechanisms, including cell viability, mRNA expression, cytokine release and immune activation;
• Performing cellular and molecular analyses, including flow cytometry, immunological assays and gene-expression measurements;
• Analysing and interpreting results, with particular attention to reproducibility and biological variability;
• Contributing to the development and optimisation of experimental protocols and methodologies;
• Monitoring research progress and reporting achievements, challenges and potential issues to the Project Leader in a timely manner;
• Preparing scientific progress reports every twelve months and a final report summarising research activities and outcomes;

• Communicating and disseminating research findings through scientific publications, conferences and outreach activities targeting scientific and wider audiences.

Qualifications, experience and skills

We are looking for highly motivated researcher with a background in cell biology, immunology, biotechnology, biomedical sciences or a related field.

The ideal candidate should have the following qualifications:

Essential:
• Doctoral degree (PhD) in Biology, Biotechnology, Medicine, Pharmaceutical Sciences, Biochemistry or similar fields;
• At least three years of hands-on laboratory experience, including culturing and working with human immune cells (primary, iPSC-derived or cell lines);
• Experience with cell-based assays and techniques such as flow cytometry, immunoassays and molecular biology methods;
• Proven track record in experimental research on advanced health biotechnologies, demonstrated through high-quality peer-reviewed publications.
• Ability to work independently in the laboratory and collaborate in a multidisciplinary team.
• Good knowledge of oral and written English (C1 level), as the working language will be English.
• Strong communication and interpersonal skills, including the ability to present scientific results clearly and work in an international environment.

Advantages:
• Experience with lipid nanoparticles, RNA therapeutics, advanced cellular models or nonanimal testing approaches;
• Experience with data analysis and statistics;
• Experience in coordinating research activities or contributing to interdisciplinary and international research projects;
• Ability to navigate complex work environments, solve experimental challenges and to handle high workload when necessary and deliver under pressure.

How to express your interest?

Please submit your application via the JRC Recruitment Portal.

Being registered for at least one of the two following databases is also necessary:

- the Selection process for contract staff | EU Personnel Selection – EU Careers (EPSO CAST FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or
- the JRC Open Call for Researchers, (JRC Call COM/1/2015/GFIV – Research), which is mainly used by the JRC.

Eligibility

For eligibility please consult this page with all the information needed.


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