## 2017-IPR-A5-FGIV-9111

## FG IV – Scientific Project Officer Exploratory Research: Antibiotics in aquatic environment - mechanism and key factors to understand the environmental contribution to the antimicrobial resistance (antibiotic4you)

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <a href="https://ec.europa.eu/jrc/">https://ec.europa.eu/jrc/</a>

The Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that may lead to novel results, which are going to qualitatively enrich the current scientific work at the JRC.

The JRC is offering a position for a contract agent in the context of the antibiotic4you exploratory research project.

The present research project will address the contribution of the aquatic environment to the microbial resistance. Antibiotics are introduced into the ecosystems by different ways and could lead to increase the number of Antibiotic Resistance Bacteria (ARB) by positive selection of those ones with Antibiotic Resistance Genes (ARGs). The project will investigate the occurrence of the resistance *in vitro* (microcosm studies) and in the environment (field studies) by characterising the microbial communities and ARGs. The final goal is the identification of a set of parameters to be considered for the antibiotic risk assessment. The candidate will be in charge of performing the DNA extraction from water sample, sequencing and analysing the data.

## **Position for:**

FG IV – Scientific Project Officer

## Qualifications:

- Doctoral degree or PhD degree (or equivalent) in Biology, or related fields e.g. microbiology, ecotoxicology or virology. As equivalent is considered University studies of at least three years attested by a diploma and at least 5 years of professional experience in a field relevant to the position.
- Knowledge and experience in PCR, primer design and Real Time PCR, DNA/RNA extraction from water samples, is essential.
- Knowledge on toxicological data and risk assessment for antibiotics in water will be an advantage.

	T
	Good oral and written communication skills in English (B2) are essential, knowledge of other languages is an asset.
	Excellent record of research activities including publications in international peer-reviewed journals.
	In addition, the following elements will be considered as an advantage:
	Ability to work in a team and multi-cultural environment
	The candidate is expected to be creative and work independently.
Directorate Unit	Health, Consumers and Reference Materials Fraud Protection and Prevention (Operational)
	The Scientific Development Unit of the Strategy and Work Programme Coordination Directorate is in charge of the overall JRC Exploratory Research Programme. The operational scientific research will take place in the Fraud Protection and Prevention Unit.
	Further information: <a href="https://ec.europa.eu/jrc/en/science-area/health-and-consumer-protection">https://ec.europa.eu/jrc/en/science-area/health-and-consumer-protection</a>
Indicative duration	24 months
JRC Site	Ispra
Country	Italy
Rules and eligibility	The candidate must be on a valid EPSO reserve list for Function Group IV contract staff or have applied to the permanent open call for researchers FG IV:
	https://ec.europa.eu/jrc/en/working-with- us/jobs/vacancies/function-group-iv-researchers
	Auxiliary contract staff: <a href="https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members">https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members</a>
	Please note that due to the high number of applications received only shortlisted candidates will be contacted.