The joint transnational call for proposals 2021, JPIAMR HARISSA

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Joint programming (JP) has been a significant tool for planning and implementing research and development actions in Europe in this millennium. The European Union, along with its Member States and partners from associated and third countries, has endeavored to adopt a more coordinated approach to financing, planning, and implementing research and innovation activities through joint actions.

The Joint Program Initiative on Antimicrobial Resistance, JPIAMR, is an international collaborative platform involving 29 countries and the European Commission in the fight against antimicrobial resistance (AMR). JPIAMR coordinates national research funding and supports collaborative efforts to address AMR knowledge gaps from the One Health perspective. The JPIAMR program identifies key areas that require attention and provides guidance to countries, aiming to harmonize national and international AMR research programs to combat antimicrobial resistance globally. Aligned with the six strategic directions of the general research and innovation agenda of JPIAMR, the partnership engages in a wide range of activities with a One Health approach, seeking and supporting solutions to reduce the transmission of antimicrobial-resistant bacteria.

The Moldovan team from the Nicolae Testemitanu State University of Medicine and Pharmacy, Republic of Moldova, is a partner in an international consortium implementing the project Phage treatment and wetland technology as an intervention strategy to prevent the dissemination of antibiotic resistance in surface waters (PhageLand). This initiative is part of the Joint Transnational Call for Proposals 2021, titled "One Health interventions to prevent or reduce the development and transmission of antimicrobial resistance" (JPIAMR HARISSA).

PhageLand aims to develop a novel intervention strategy that combines the cost-effective and envi-

ronmentally friendly treatment capabilities of constructed wetlands with specific phage-based treatments. The goal is to prevent the transfer of antibiotic resistance from wastewater to surface water. The PhageLand project, a multi-stakeholder study, utilizes public health methods to identify multidrug-resistant bacterial pathogens in the Republic of Moldova. Phage-based treatments have been adapted to eliminate these multidrug-resistant pathogens from wastewater. Simultaneously, PhageLand assesses, in Spain and Moldova, the capacity of real-scale wetlands to self-purify from antibiotic residues, antibiotic-resistant bacteria, and antibiotic resistance genes. The project also explores the potential risks associated with the dissemination of the latter in native bacterial communities and among wetland animals.

The project serves as a commendable model for the involvement of researchers from the Republic of Moldova in multilateral projects addressing significant global and national issues. It facilitates the development of capacities among Moldovan researchers, fosters the establishment of networks with colleagues from various countries, and enhances the visibility of Moldovan researchers on the international stage.