HORIZON EUROPE CASE STUDY

Northern Ireland scientists finding success in Horizon Europe

Ulster University joins Europe wide project to improve the prevention and diagnosis of lung cancer

With a budget of €14M, 22 partners across Europe and led by Technion, Israel Institute of Technology , the LUCIA project aims to improve the early detection and management of lung cancer.

Researchers from the School of Computing, Engineering and Intelligent Systems, the School of Computing and the School of Geography and Environmental Sciences at Ulster University, have joined a new Horizon Europe project which seeks to improve disease outcome by providing in-depth knowledge of the risk factors and facilitating prevention and early diagnosis of lung cancer.

The Ulster University group will be joined by researchers from the public and private sectors across nine European countries who are partnering up for the LUCIA project (Understanding Lung Cancer-Related Risk Factors and their Impact).

The consortium's goal is to improve the management of lung cancer from the aspects of early diagnosis, prevention and treatment, notably of lung cancers that are relatively rare. The results of the consortium's work will be translated into policy recommendations, which will be integrated into the early diagnosis program and into methods for addressing the disease effectively.

The Ulster University team is led by Dr Debbie Rankin who is based at Ulster University's Magee campus (pictured) and includes co-investigators Professor Jonathan Wallace (School of Computing), Professor Michela Black (School of Computing, Engineering and Intelligent Systems) and Professor Adrian Moore (School of Geography and Environmental Sciences). Dr Rankin said that Ulster will tackle a number of key tasks in the project. ""Ulster's role in the project includes the development of geospatial analytics, risk factor modelling using artificial intelligence (AI) techniques and the definition of user and clinical requirements." Ulster will also develop KPIs and validation metrics for the project through engagement with stakeholder groups and LUCIA's clinical and technical partners.

Ulster will also contribute to the project through risk factor analysis on environmental and sociodemographic geospatial data and the use of AI and GeoAI techniques to examine location-based social and physical environmental risk factors in lung cancer. The team will also engage in other aspects including epidemiological analysis; legal, social and ethical AI issues; evaluation; and dissemination.

The UK has now associated to Horizon Europe and with new funding calls opening soon isn't time you considered an application?

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