



Postdoctoral Researcher-Data Scientist in Global Health

College of Medicine, Nursing & Health Sciences Ref. No. 011136

JOB ADVERTISEMENT

Applications are invited from suitably qualified candidates for a full-time, fixed term position as a Data Scientist within the Global Health programme at the University of Galway, Ireland.

This position is available from 1 September 2025 to contract end date of 31 August 2026.

We are seeking a highly skilled and motivated Data Scientist to join the Global Health team within the School of Health Sciences, University of Galway. The team is led by Professor Máire Connolly, Professor of Global and Environmental Public Health at University of Galway. Prior to joining University of Galway, Prof Connolly worked at WHO/HQ in Geneva for 15 years as Coordinator of WHO's Disease Control in Emergencies Programme and Advisor to WHO's Assistant Director-General for Health Security.

Prof Connolly is currently PI of the Horizon Europe RAPIDE project, the EU4HEALTH One Health ALLIES project, the Research Ireland Insight Platform II Health Co-benefits Climate Action project and the Research Ireland Industry VENPREP project. Prof Connolly is also academic representative on the One Health Oversight Committee chaired by the Chief Medical Officer in Department of Health and Chief Veterinary Officer in Dept of Agriculture, Food & Marine with ASG in the Department of the Environment, Climate and Communications.

The successful candidate will join a multidisciplinary team of researchers working in three broad thematic areas of Global Health: Global Health Security and Pandemic Preparedness, One Health, Climate Change and Health (co)Benefits conducting research in the areas of the application of informatics, modelling and simulation for public health, participatory surveillance and use of big data for disease surveillance, use of visual analytics to support decision making in outbreak response and game-based learning for pandemic management.

Salary: Postdoctoral Researcher / Research Associate salary scale € €45,846 – €58,481 per annum, (subject to the project's funding limitations), and pro rata for shorter and/or part-time contracts.

The default position for all new public sector appointments is the 1st point of the salary scale. This may be reviewed, and consideration afforded to appointment at a higher point on the pay scale (subject to the project's funding limitations), where evidence of prior years' equivalent experience is accepted in determining placement on the scale above point 1, subject to the maximum of the scale. (Research Salary Scales - University of Galway)

Closing date for receipt of applications is 17:00 (Irish Time) on the 3rd July 2025. It will not be possible to consider applications received after the closing date.





JOB DESCRIPTION

Job Description:

The successful candidate will have an exciting opportunity to collaborate on existing research within the team on One Health surveillance. The One Health All Ireland for European Surveillance (OH-ALLIES) project, implemented with the Dept of Agriculture, Food and Marine and funded through EU4Health evaluates surveillance systems for influenza and other priority zoonotic pathogens. The research conducted will include using recommendations identified within the study to develop a prototype IT platform linking animal and human early warning systems for influenza in Ireland. In addition, the candidate will lead next stage design and development of the EU-funded <u>PANDEM-2</u> dashboard in serious gaming and simulation exercises for national and EU management of serious health threats.

With the PI, the successful candidate will also explore new funding opportunities to build on current work in developing decision support tools for policymakers in the area of Health co-benefits of Climate Action. The candidate will have an opportunity to explore new opportunities within Global Health research in areas such as artificial intelligence, machine learning, modelling, data analytics and/or associated areas of research that compliments the research portfolio of the team. Finally, the candidate will have a unique opportunity to contribute to teaching on global health to undergraduate and post graduate students in College of Medicine, Nursing and Health Sciences.

Duties:

- Under the supervision of the programme PI, conduct independent research in Global Health.
- Present on research progress and outcomes e.g. to bodies supervising research; conferences, steering groups; other team members, as agreed with the PI / project leader.
- Select and implement advanced data models and algorithms for the integration and analysis of One Health data, covering human, animal, and environmental health.
- Conduct an in-depth assessment of the current surveillance systems and IT platforms used in Ireland for influenza and other priority emerging zoonotic pathogens in animals. This includes analysing data sources, indicators, and information flow within the surveillance ecosystem and links to human influenza surveillance systems.
- Identify and assess gaps in the current IT surveillance systems, including but not limited to data completeness, volume, timeliness, and relevance of datasets. Work to understand how these gaps impact early warning and alert mechanisms, reporting capabilities, and policy decision-making processes.
- Analyse and interpret complex health data, including epidemiological, clinical, and socioeconomic datasets, to uncover trends and actionable insights.
- Support the validation process for data sources and indicators. This will involve examining the accuracy, reliability, and usefulness of data to ensure it can support decision-making at the national and international levels
- Design, develop, and implement decision support tools, such as interactive dashboards and real-time monitoring systems, to aid stakeholders in making data-driven health decisions.





- Ensure alignment with broader project objectives and maintaining seamless integration of data insights across teams. Work closely with epidemiologists, veterinarians, and IT specialists to interpret data and provide actionable recommendations.
- Provide actionable insights regarding best practices for data reporting, early warning systems, and the use of data in shaping public health policy decisions related to climate, human and animal diseases.
- Collaborate with multidisciplinary teams to design and optimize decision support tools to improve health response strategies.
- With the support of the team, actively seek out new funding opportunities in areas that compliment and strengthen the area of Global health research within University of Galway.
- Contribute to the delivery of postgraduate teaching in Global Health.
- Any other duties assigned commensurate to this level of post

ELIGIBILITY REQUIREMENTS

Essential Requirements:

- PhD in Computer Science, Data Science, or other relevant field OR a minimum of a primary degree in a relevant discipline with at least 4 years full-time relevant research experience in a domain related to computer science, software development, or similar.
- Experience with data analytics, statistical modelling, machine learning techniques and artificial intelligence preferably within the context of global health or healthcare research
- Experience in computer/data science/software development specifically within the context of global health or healthcare research.
- JavaScript experience, in both Nodejs and Angular or another similar frontend framework
- Proficiency in programming languages such as Python, R, or SQL, and experience with relevant data analysis and visualization libraries.
- Experience in analysing and visualizing large datasets, particularly in the context of global health. This will involve leveraging pre-existing datasets as well as targeting and integrating new open source datasets where applicable.

Desirable Requirements:

- Experience working in cross-disciplinary teams and collaborating with stakeholders across various sectors.
- Knowledge and/or experience of public health, animal health, zoonotic diseases, or surveillance systems.
- Experience with database management systems and data integration across different platforms.
- Experience in writing and contributing to grant proposals or funding applications.
- Experience teaching at an undergraduate and/or postgraduate level
- Student supervision





CONTINUING PROFESSIONAL DEVELOPMENT

Continuing Professional Development/Training:

Researchers at University of Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans. University of Galway provides continuing professional development supports for all researchers seeking to build their own career pathways either within or beyond academia. Researchers are encouraged to engage with our Researcher Development Centre (RDC) upon commencing employment - see <u>HERE</u> for further information.

FURTHER INFORMATION/LINKS

- **TO APPLY:** <u>Search Current University of Galway vacancies</u>. Applications must be submitted online.
 - o <u>How to apply guide</u>
- For informal enquiries, please contact Prof Máire Connolly, Global Health, School of Health Science at <u>maire.connolly@universityofgalway.ie</u>
- <u>University's Strategic Plan</u>
- Working in Research at University of Galway
- Moving to Ireland (Euraxess)
- <u>Applicant Information</u>
- We reserve the right to re-advertise or extend the closing date for this post.
- University of Galway is an equal opportunities employer.
- All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.

