

Candidate Information

Position: Research Fellow in Data Science
School/Department: School of Biological Sciences
Reference: 26/113310
Closing Date: Monday 29 June 2026
Salary: £41,519 per annum
Anticipated Interview Date: Friday 10 July 2026
Duration: 35 months or until 31 March 2029, whichever is soonest

JOB PURPOSE:

An experienced and motivated postdoctoral scientist is sought to join the Kyriazakis Quantitative Animal and Veterinary Science Group at the School of Biological Sciences of Queen's University Belfast. The cross-disciplinary group consists of members with skills in veterinary and animal science, sustainability assessment, and data and computer sciences. The successful candidate will undertake a senior role in the planning and delivery of research activities focused on assessing the interconnections between inputs and outputs in beef cattle and sheep systems in relation to animal health by using AI tools.

The Group focuses on the development and application of transformative technologies for, and the quantitative assessment of their impacts on the sustainability of livestock systems. This particular role addresses the latter, as the job holder will be expected to develop methods and apply them for the Surveillance and Early Warning for Emerging Threats in Livestock using Artificial Intelligence. The post is aligned with SENTINEL, a collaborative project between the leading agricultural and veterinary Institutions on the island of Ireland.

The successful candidate will have a demonstrable track record in Data Science with an excellent PhD degree awarded and strong publication record. The successful applicants will have responsibilities in independent research, supervision, planning, day-to-day lab management, collaborations and outreach.

MAJOR DUTIES:

1. Undertake and advise on the day-to-day research necessary to achieve Queen's University objectives within the SENTINEL project. More specifically Lead research in:
 - a. the use of AI approaches to extract and assess interconnectivity between inputs and outputs in beef systems. This includes both data mining, extraction and analysis of existing large datasets, and advice on enhancement of these data capture processes;
 - b. the creation of a new database for sheep systems, allowing usability of information that is currently in disparate and unstructured sources.
2. Participate in group project meetings and external project meetings, including the development of progress reports describing and reflecting on the outcomes of the project.
3. Input in the formal quarterly reporting to the project funders, which in the case of this project are DAERA (N Ireland) and DAFM (Eire).
4. Assist with the planning, development, and publication of research work within the project – taking a lead where appropriate.
5. Participate in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field. Prepare and present talks, posters and reports to disseminate the results of the research.
6. Assist with the preparation of (potentially collaborative) journal papers for publication of project findings.
7. Contribute to the supervision and training of post-graduate/undergraduate students and visiting researchers.
8. Participate in writing new research proposals that build on the expertise developed in this project; through this, start to develop an independent research profile.

9. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting.
10. Any other duties appropriate to the grade and position as directed by Professor Ilias Kyriazakis and other senior members of the project team.

ESSENTIAL CRITERIA:

1. Have or about to obtain* a PhD in Data Science or a related discipline (*must be obtained within 3 months of commencement of employment).
2. Significant relevant research experience in data mining and fusion, and dealing with large datasets that may contain potentially noisy, structured or unstructured data.
3. Experience in Machine Learning and in programming languages such as Python, C++ or Go.
4. Experience in statistical methodology, dealing with epidemiological approaches to the interconnectivity of inputs and outputs in livestock systems.
5. Peer reviewed publications or preprints in the area of Data Science, including first author ones.
6. Ability to contribute to broader management and administrative processes.
7. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
9. Competent in giving effective and informative oral and poster presentations.
10. Ability to communicate complex information clearly.
11. Ability to build contacts and participate in internal and external networks.
12. Strong ability to work from own initiative and to work independently within the context of a research team.
13. Ability to assess and organise resources.
14. Commitment to high quality research.
15. Demonstrable intellectual ability.
16. Irregular hours including evening, weekend and other out-of-hours work may be a component of the research at times.
17. Willingness to travel to national and international meetings and collaborative partner facilities as required on an ad-hoc basis.

DESIRABLE CRITERIA:

1. Experience with databases relevant to livestock systems.
2. Experience with animal health issues in beef and sheep systems.
3. Practical experience in processing, recording and handling data sets, and performing statistical analysis.
4. Experience of operating as part of a multidisciplinary team with common high level objectives.
5. Strong publication record in peer reviewed journals.
6. Experience in research project reporting.
7. Evidence of having presented at conferences (poster and/or oral presentations).
8. Driving Licence to enable travel within Northern Ireland for project objectives.

ADDITIONAL INFORMATION:

Informal enquiries may be directed to: Eric Morgan at eric.morgan@qub.ac.uk