

Candidate Information

Position:	Research Fellow (Environmental Molecular Virology)
School/Department:	School of Biological Sciences
Reference:	26/113470
Closing Date:	Monday 3 August 2026
Salary:	£42,972 - £48,339 per annum
Anticipated Interview Date:	Wednesday 19 August 2026
Duration:	29 months

JOB PURPOSE:

We are seeking to appoint a Research Fellow in Environmental Molecular Virology to join the 'EnviroFlu' work package of an all-Ireland DAERA-DAFM funded research project (ALLIES-Z Path; All Island of Ireland Surveillance of Zoonotic Pathogens) in the group of Dr Connor Bamford working with QUB collaborators Prof. John McGrath and Dr Deirdre Gilpin based primarily in the School of Biological Sciences and Institute for Global Food Security at Queen's University Belfast

The successful candidate will work on the EnviroFlu work package seeking to develop and apply novel environmental monitoring approaches to understand and track avian influenza virus ecology, which is important because of pandemics, livestock health, and wildlife/ecology. This is in the context of the wider 'ALLIES-Z-Path', which is a 4 year, 3 million Euro strategic cross-border project between QUB and AFBI in NI and UCD and Teagasc in ROI seeking to tackle zoonotic viral threats to both jurisdictions. The work focuses on emerging animal influenza A viruses, vector-borne flaviviruses, and disease X/Y.

The proposed work builds upon previously published work from the group exploiting wastewater- based epidemiology to track human and avian influenza viruses. Furthermore, exciting preliminary work has applied this to natural environmental samples working with local wildlife reserves. This project will expand this to an-island scale.

We are seeking a candidate with a strong background in molecular detection and genomics where experience in conducting field sampling and virology/microbiology would be beneficial. This position provides an excellent opportunity for ambitious researchers with interests across virology or disease ecology and the postholder will be embedded within an exciting and interdisciplinary network of researchers at Queen's and beyond in the Northern Ireland Avian Influenza Forum (NIAIF).

MAJOR DUTIES:

1. To lead research under supervision of the principal investigator and collaborators.
2. Design experiments (sample collection [including driving to sites], sample processing, molecular detection, sequencing and analysis) in line with the study ambitions and ensure timely delivery of data and publications.
3. Present data in lab meetings to members of the research group or to external audiences to disseminate and publicise research findings.
4. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
5. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
6. To maintain links with collaborators, project mentors and commercial partners.
7. To carry out occasional supervision of other research staff and students associated with the project.
8. Any other reasonable duties within the general remit of the post.

ESSENTIAL CRITERIA:

1. Have or be about to obtain a PhD in Molecular Virology/Microbiology, Molecular Ecology, or related research area.
2. At least 3 years' relevant research experience.

3. Significant, recent, relevant research experience in molecular virology/microbiology in techniques like nucleic acid extraction, RT-qPCR.
4. Well-developed understanding of relevant regulations and procedures including Health and Safety requirements and of COSHH regulations.
5. Interest in interdisciplinary research.
6. Ability to manage own research project including working to deadlines and being accountable for deliverables.
7. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programme.
8. Ability to communicate complex information clearly.
9. Ability to build contacts and participate in internal and external networks.
10. Demonstrable intellectual ability.
11. Ability to assess and organise resources.
12. Ability to work efficiently as a team member and be highly motivated.
13. A full driving licence to permit driving within the UK will be required.
14. Must be prepared to travel and undertake work with collaborators based in UK/Europe.

DESIRABLE CRITERIA:

1. Experience in pathogen genomics (including both wet-lab and bioinformatic approaches)
2. Experience in collection and handling of environmental samples or clinical samples.
3. Peer reviewed publications or pre-prints within a relevant field.

ADDITIONAL INFORMATION:

Informal Enquiries to Dr Andrew Lee: a.j.lee@qub.ac.uk