

Candidate Information

Position: Research Fellow
School/Department: School of Biological Sciences
Reference: 26/113112
Closing Date: Monday 16 February 2026
Salary: £41,519 - £44,035 per annum
Anticipated Interview Date: Friday 27 February 2026
Duration: Available until 30 April 2029

JOB PURPOSE:

The School of Biological Sciences and Institute for Global Food Security at Queen's University Belfast is currently seeking to appoint an exceptional candidate to the post of Post-doctoral Research Fellow. The appointee will join the Huws group, focused on sustainable livestock production using the disciplines of Microbiology, Animal Science, and Bioinformatics. The successful candidate will primarily work within a multidisciplinary team undertaking research focused on sustainable ruminant production, with an emphasis on methane mitigation.

The successful candidate will work within the new £6M PeacePlus project (Acronym: CliBeef) focused on reducing methane emissions from grazing suckler beef systems (<https://www.seupb.eu/latest/news/eu65m-peaceplus-funding-awarded-collaborative-innovation-projects-boost-productivity>). The project presents a unique opportunity to rapidly develop innovative and transformative solutions for grazing systems, which largely dominate in UK and European agricultural systems, to transition the agri-food system to climate-neutrality by 2050. The successful candidate will be expected to develop innovative solutions for the introduction of dietary interventions to reduce methane emissions in grazing situation, through to understanding the effects of stacking different dietary interventions on animal phenotype and methane emissions, whilst understanding the mechanism of action with respect to the rumen microbiome. A PhD student has also been recruited to aid delivery on the project and there will be an expectancy that the candidate works closely with them as a named supervisor, as well as being a core team member within the group.

The candidate will be expected to lead the research and deliver reports/publications thereafter in a timely and professional manner.

MAJOR DUTIES:

1. To lead research under supervision of the principal investigator.
2. Design experiments in line with the hypotheses asked and ensure timely deliver of data and reports and publications. This requires the ability to make logical decisions and be able to problem solve effectively.
3. To develop innovative solutions to introduce dietary interventions to reduce methane emissions into grazing situations.
4. To run in vitro experiments to investigate an array of dietary interventions separately and 'stacked' together on rumen fermentation and methane emissions.
5. Aid the design of ruminant experiments with partners, alongside defining sampling strategies for downstream analysis by the successful candidate.
6. To implement and run the computational workflows necessary for understanding the microbial community profiles of rumen microbiome samples associated with strategies for reducing methane emissions in ruminants.
7. Communicate effectively and professionally, both orally and through e-mail to line manager and other partners involved in the project.
8. Prepare, in consultation with supervisor, and providing industry consent is given where required, material for publication in national and international journals and presentations at conferences.

9. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
10. Help supervise the PhD student linked to this project as a named supervisor, whilst aiding other PhD students as appropriate.
11. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
12. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
13. Assist grant holder in the preparation of funding proposals and applications to external bodies.
14. Aid effective team working within the group led by the principal investigator.
15. Any other duties as may be reasonably assigned.

ESSENTIAL CRITERIA:

1. Hold or be about to obtain a PhD in a relevant area (animal science and/or microbiology (with an emphasis on anaerobic microbiology)).
2. Significant, relevant research experience to include:
 - Experience of in vitro technologies used to mimic the rumen ecosystem
 - Experience of designing large-scale ruminant experiments
 - Demonstrable microbiome analysis experience
 - Metabolomic analysis experience.
3. Experience of peer-reviewed publication in a relevant area of research, within World-leading journals.
4. Experience of supervising undergraduates and/or postgraduate students.
5. Experience of presenting to the scientific community i.e. conference talks.
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. Ability to communicate complex information clearly.
10. Demonstrable intellectual ability.
11. Ability to assess and organise resources and deliver in a timely manner.
12. Experience of working in a team.
13. Irregular hours including evening, weekend and other out-of-hours work may be a component of the research at times.
14. Must be willing to travel to national and international meetings and collaborative laboratories as required on an ad-hoc basis.

DESIRABLE CRITERIA:

1. P.ost-PhD post-doctoral work experience.
2. Experience of working alongside industry partners.
3. Peer reviewed publications or preprints in the area of methane mitigation from ruminants.
4. Evidence of having presented at international conferences (poster and/or oral presentations).