

# **Candidate Information**

Position:	Research Fellow in Metagenomic Analysis of Microbial Communities
School/Department:	Institute for Global Food Security
Reference:	23/110788
Closing Date:	Monday 17 April 2023
Salary:	£36,333 per annum
Anticipated Interview Date:	Wednesday 26 April and Tuesday 2 May 2023
Duration:	12 months or until 30 April 2024, whichever is sooner

## JOB PURPOSE:

To be an active member of the Huws Lab; Carrying out metataxonomic and metagenomic analyses of microbial communities as part of the EU INTEGRITY project.

### **MAJOR DUTIES:**

- 1. To undertake research under supervision of the principal investigator.
- 2. 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.
- 3. Carry out statistical analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
- 4. Generate reports and communicate the results of analyses with partners on the project.
- 5. Communicate orally and through e-mail effectively to line manager and those involved in the project.
- 6. Aid effective team working within the group led by the Principal investigator.
- 7. Supervision of students alongside the Principal Investigator.
- 8. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings. To undertake research under supervision within a specific research project.
- 9. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- 10. 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.
- 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.

### **ESSENTIAL CRITERIA:**

- 1. Hold or is about to be awarded a PhD in a relevant area (biological sciences, microbiology).
- 2. 3 years relevant experience in computational approaches for the analysis of high-throughput DNA sequencing data from microbial communities.
- 3. Some experience of peer-reviewed publication in a relevant area of research.
- 4. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 5. Ability to communicate complex information clearly.
- 6. Demonstrable intellectual ability.
- 7. Ability to assess and organise resources.

#### **DESIRABLE CRITERIA:**

1. Experience in the analysis of rumen microbial communities.

- 2. Demonstratable experience in the use of linux command-line systems for bioinformatics analyses.
- 3. Knowledge of the challenges and approaches towards reducing methane emissions from ruminants.
- 4. Some experience of supervising undergraduates and/or postgraduate students.
- 5. Experience of presenting to the scientific community i.e. conference talks.