

# **Candidate Information**

**Position:** Research Fellow

School/Department: Institute for Global Food Security

**Reference:** 20/108161

Closing Date: Monday 30 March 2020
Salary: £33,797 per annum.
Anticipated Interview Date: Wednesday 8 April 2020

**Duration:** This post is available for 18 months with possibility of extension.

### JOB PURPOSE:

To be an active member of a research team working on the 'FlockFocus' project to develop new vision-based methods for automated assessment of broiler chicken behaviour and welfare. Responsibilities of this post-holder will include on-farm animal welfare data collection and labelling of images to underpin new automated approaches being developed by engineers at Queen's University Belfast.

## **MAJOR DUTIES:**

- 1. Undertake research under supervision within a specific research project as a member of a team including animal behaviour and welfare scientists and engineers with expertise in artificial intelligence and advanced machine learning techniques.
- 2. Design, develop and refine experimental approaches in order to obtain reliable data.
- 3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to this area of research.
- 4. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 5. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- 6. Assist grant holder in the preparation of funding proposals and applications to external bodies.
- 7. Carry out routine administrative tasks associated with the research project to ensure that it is completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 8. 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.
- 9. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

### **Planning and Organising:**

- 1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
- 2. Plan for the use of research resources and laboratories where appropriate.
- 3. Plan own day-to day activity within framework of the agreed research programme.
- 4. Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
- 5. Coordinate and liaise with other members of the research group over work progress.

### **Resource Management Responsibilities:**

- 1. Ensure research resources are used in an effective and efficient manner.
- 2. Provide guidance as required to support staff and any students who may be assisting with research.

# Internal and External Relationships:

- 1. Liaise on a regular basis with colleagues and students.
- 2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- 3. Join external networks to share information and ideas.
- 4. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

#### **ESSENTIAL CRITERIA:**

- 1. Have or be about to obtain a relevant PhD in animal behaviour and/or welfare or related area.
- 2. At least 3 years recent relevant research experience to include experience in recording and analysing farm animal behaviour.
- 3. Recent original research publications in reputable peer-reviewed journals, commensurate with career stage.
- 4. Ability to contribute to broader management and administrative processes associated with collaborative, internationally-funded research projects.
- 5. Knowledge of broiler chicken production systems, and of broiler behaviour and welfare.
- 6. Ability to communicate complex information clearly.
- 7. Ability to build contacts and participate in internal and external networks.
- 8. Demonstrable intellectual ability.
- 9. Ability to assess and organise resources.
- 10. Willingness to work in commercial farm environments.
- 11. If necessary, willingness to undertake international travel to the United States for a limited period (e.g. 1-6 weeks) to gather on-farm data for validation purposes.

#### **DESIRABLE CRITERIA:**

- 1. Relevant experience in assessing poultry behaviour.
- 2. Experience in contributing to the development of automated vision-based animal welfare assessment tools.
- 3. Experience in programming with data analytics tools e.g. matlab or python.