

## **Candidate Information**

**Position:** Research Fellow

School/Department: School of Biological Sciences

**Reference:** 19/107627

Closing Date: Wednesday 7 August 2019

Salary: £33,199 per annum.

**Duration:** Available for 3 years or until 31 December 2022 at spinal point 30

## JOB PURPOSE:

To be an active member of the research project/team assisting in the development of research proposals and the planning and delivery of the research activity within a specified area so that the overall research objectives of the project/school are met.

# **MAJOR DUTIES:**

- 1. Develop and plan an area of personal research and expertise, and/or undertake research under supervision within a specific research project or as a member of a research team.
- 2. Design, develop and refine experimental apparatus, field research or experiments in order to obtain reliable data.
- 3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to 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/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.
- 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, laboratories and workshops 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 about to obtain a PhD in a relevant area such as computational biology, bioinformatics, or microbiology, with a focus on computational analyses.
- 2. At least 3 years recent relevant research experience.
- 3. Experience in the development of computational pipelines for metagenomic and metatranscriptomic data applied to diverse environments.
- 4. Contribute to general culture of the laboratory, particularly passing on skills to new members
- 5. Experience of high-throughput middleware/pipeline design for biological analysis.
- 6. General familiarity with common bioinformatics tools, utilities, programming languages and operating systems.
- 7. Experience in the use of statistical methods for data analysis.
- 8. Development of methodologies to identify ecological traits in metagenomic data.
- 9. Ability to communicate complex information clearly.
- 10. Ability to build contacts and participate in internal and external networks.
- 11. Demonstrable intellectual ability.
- 12. Ability to assess and organise resources.

## **DESIRABLE CRITERIA:**

- 1. Experience in the analysis of aquatic and ruminal metagenomes.
- 2. Experience in international contexts.
- 3. Developing and maintaining open source packages.
- 4. Experience programming in Python.