

## **Candidate Information**

Position: Research Fellow in Environmental Microbiology

School/Department: School of Biological Sciences

19/107762

Closing Date: Wednesday 18 September 2019

Salary: £33,199 per annum

**Duration:** 11 months or until 31 October 2020

## **JOB PURPOSE:**

Reference:

To be an active member of a research team assisting in the development of biological approaches to nutrient removal from wastewater. This will involve studying the physiology, biochemistry and ecology of the microorganisms involved, through the bioinformatic interrogation of already generated metagenomic and metatranscriptomic libraries. The post holder will be responsible for the planning and delivery of the research activity within this project so that the overall research objectives of the project are met. This post is available immediately for 11-months or until 31 October 2020 (whichever is sooner).

#### **MAJOR DUTIES:**

- 1. To interrogate already generated metagenomic and metatranscriptomic libraries to investigate the mechanisms by which microorganisms cycle phosphorus.
- 2. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to the area of research.
- 3. To present regular progress reports to the research team and external audiences to publicise research findings.
- 4. To maintain links with collaborators, project mentors and commercial partners.
- 5. Carry out routine administrative tasks associated with the research project to ensure that project is completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities
- 6. To carry out occasional supervision of other research staff and students associated with the project.
- 7. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
- 8. Any other reasonable duties within the general remit of the post.

# **Planning and Organising:**

- 1. Plan for specific aspects of research programmes and contribute to research group planning.
- 2. Plan for the use of research resources, and laboratories and workshops.
- 3. Plan own day-to day activity within framework of the agreed research programme.
- 4. Plan in advance to meet deadlines for reports, and to prepare presentations for partner meetings.
- 5. Coordinate and liaise with other members of the research group over work progress.
- 6. To attend and present at the meetings with project collaborators and advisers.

#### **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.
- 3. To manage resources and time efficiently to ensure timely completion of the planned and agreed tasks.

## 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. Liaise with commercial partners 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 PhD in Microbiology, or related research area.
- 2. At least 3 years' recent relevant research experience
- 3. Experience in relevant bioinformatic and statistical tools and approaches for sequence data handling, analysis, and interpretation in relation to microbial systems.
- 4. Recent relevant experience of the isolation, culture and assay of the activity of environmental microorganisms.
- 5. Ability to manage own research project including working to deadlines and being accountable for deliverables.
- 6. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programme.
- 7. Ability to communicate complex information clearly.
- 8. Ability to build contacts and participate in internal and external networks.
- 9. Demonstrable intellectual ability.
- 10. Ability to assess and organise resources.
- 11. Ability to work efficiently as a team member and be highly motivated.
- 12. Must be willing to travel to national and international meetings and undertake work with collaborators.
- 13. Irregular hours including evening, weekend and other out-of-hours work will be a component of the research at times.
- 14. Access to transport or ability to meet the mobility requirements of the post.

#### **DESIRABLE CRITERIA:**

1. Knowledge of phosphate removal practices and microbial phosphorus metabolism.