Candidate Information

Position:	Research Fellow
School/Department:	Institute for Global Food Security
Reference:	19/107156
Closing Date:	Monday 4 March 2019
Salary:	£33,199 - £39,610 per annum (potential to progress to £43,266 per annum through sustained exceptional contribution)
Duration:	Until 30 June 2019

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 be about to obtain a PhD degree in Chemical Engineering, Clinical Microbiology, or Biomedical Engineering.
2. At least three years recent relevant research experience
   Experience of molecular diagnostics for microorganism.
   Experience of pathogenic bacteria detection using either conventional PCR or advanced micro- and nanotechnology
3. Experience of molecular diagnostics for microorganism.
4. Experience of pathogenic bacteria detection using either conventional PCR or advanced micro- and nanotechnology
5. General lab-on-a-chip knowledge; microfabrication skills.
6. Some experience of supervising undergraduates and/or postgraduate students
7. Ability to contribute to broader management and administrative processes.
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. Ability to build contacts and participate in
    internal and external networks.
11. Demonstrable intellectual ability.
    Ability to assess and organise resources.
12. Flexibility regarding working hours

DESIRABLE CRITERIA:

1. Experience in the development of paper-based microfluidic devices
2. Strong molecular diagnostics background.
   Point-of-care diagnosis.