



## Candidate Information

<b>Position:</b>	Research Fellow,
<b>School/Department:</b>	Institute for Global Food Security
<b>Reference:</b>	22/109930
<b>Closing Date:</b>	Monday 25 July 2022
<b>Salary:</b>	£34,304 - £36,382 per annum
<b>Anticipated Interview Date:</b>	Monday 8 August 2022
<b>Duration:</b>	Fixed Term available until 31 October 2023

### JOB PURPOSE:

To be an active member of the research team; planning and delivering the main objectives of an Invest NI Proof of Concept grant project to extend further development of technologies for discovery of novel antimicrobials.

### MAJOR DUTIES:

1. To undertake research under supervision of the principal investigator.
2. Aid discovery, development and understanding of antimicrobials for patent development, publication and future grant applications. This requires the ability to make logical decisions and be able to problem solve effectively.
3. Carry out statistical analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research. Communicate orally and through e-mail effectively to line manager and those involved in the project.
4. Aid effective team working within the group led by the Principal investigator.
5. Supervision of students alongside the Principal Investigator.
6. 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.
7. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
8. 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.
9. 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.
10. 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. At least 3 years research experience to include:
  - Experience of antimicrobial discovery for treating of pathogens.
  - Demonstrable computational or laboratory experience relevant to microbiology.
3. Some experience of peer-reviewed publication in a relevant area of research.
4. Some experience of supervising undergraduates and/or postgraduate students.
5. Experience of presenting to the scientific community i.e. conference talks.
6. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
7. Ability to communicate complex information clearly.
8. Demonstrable intellectual ability.
9. Ability to assess and organise resources.

### DESIRABLE CRITERIA:

1. Experience of pre-clinical antimicrobial development.
2. Experience in the use of machine learning approaches for DNA sequence data analysis.
3. Experience in the analysis of high-throughput DNA sequencing data for the purpose of identifying antimicrobial compounds.
4. Knowledge of best practice laboratory techniques for high-throughput antimicrobial screening (e.g., calculating kill activity and toxicity and other antimicrobial properties of novel compounds) and validating peptide chemistry (e.g., via mass spectrometry).