

## Candidate Information

<b>Position:</b>	Research Assistant
<b>School/Department:</b>	Institute for Global Food Security
<b>Reference:</b>	18/106941
<b>Closing Date:</b>	Wednesday 5 December 2018
<b>Salary:</b>	£27,831 - £32,236 per annum (potential to progress to £35,210 per annum through sustained exceptional contribution)
<b>Anticipated Interview Date:</b>	January 2019
<b>Duration:</b>	24 months

### JOB PURPOSE:

To be an active member of the research team assisting in the planning and delivery of research led by Dr Katrina Campbell at the Institute of Global Food Security within the framework of the H2020 EU project Eurobiotox. This research project is a European Program for the Establishment of Validated Procedures for the Detection and Identification of Biological Toxins.

### MAJOR DUTIES:

1. Undertake research to develop and validate both immunological and analytical methods of analysis for biological toxins including small molecular weight molecules and proteins.
2. Carry out basic chemistry for the derivatisation of small molecular weight contaminants to enable coupling chemistry to be performed to proteins or chemical surfaces.
3. Conduct chromatographic /spectroscopic analyses for compound identification when required and undertake the critical evaluations & interpretation of the results.
4. Perform immunisation programmes and/or cell culture techniques for antibody production
5. Carry out the characterisation of immunological reagents produced using immunological/biosensor/molecular methods for activity monitoring.
6. Perform experiments immunological, HPLC and/or mass spectrometry based to demonstrate single laboratory validation of developed or commercial methods for toxin detection
7. Assist in the set-up of inter-laboratory proficiency tests for the validation of developed immunological, analytical and/or commercial methods
8. Present regular progress reports on research to members of the research group, project partners or to external audiences to disseminate and publicise research findings.
9. Write up results of own work and contribute to the production of research reports, publications and proposals.
10. May contribute to introductory courses, for example, on the use of research methods and equipment.
11. Carry out undergraduate supervision/demonstrating/teaching duties under direction.
12. Carry out any other duties designated by a line manager and which fall within the general ambit of the post.

### Planning and Organising:

1. Plan own day-to-day activity within the framework of the agreed research programme.
2. Contribute to the planning of research projects, reports and publications etc usually 1-6 months in advance.
3. Read academic papers, journals and textbooks to keep abreast of developments.

### Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.
2. Ensure health and safety protocols (COSHH) for use of materials are complete and records maintained up to date in compliance with licence requirements
3. Carry out maintenance and calibrations of instrumentation used in the laboratory where necessary
4. Provide guidance as required to support staff and any students who may be assisting with research.

5. Carry out routine administrative duties as requested, e.g. arranging research group meetings and assisting in the organisation of workshops for EU Project Partners

**Internal and External Relationships:**

1. Liaise with research colleagues and support staff on routine matters.
2. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.
3. Attend and contribute to relevant meetings.

**ESSENTIAL CRITERIA:**

1. 1st class or 2.1 Degree or equivalent in biochemistry, chemistry or analytical science or related discipline
2. Some practical experience in ELISA, LFD and/or biosensor methods
3. Some practical experience in HPLC and/or Mass Spectrometry
4. Some practical experience in the validation of analytical methods
5. Experience in the preparation of workshops for teaching and training activities.
6. Willingness to contribute to the School and project outreach activities in a professional manner
7. Ability to contribute to method improvement where required.
8. Strong analytical and problem solving skills
9. Ability to logically conceptualise and summarise the research findings and data
10. Ability to train staff & students in lab techniques
11. Ability to interact with research colleagues and support staff
12. Ability to analyse and communicate effectively.
13. Demonstrable intellectual ability.
14. Willing to conduct animal scientific procedures where necessary
15. Willing to travel to support the dissemination activities at meetings / workshops in Europe

**DESIRABLE CRITERIA:**

1. May be working towards a PhD or post graduate qualification.
2. Knowledge of proficiency tests and inter-laboratory studies
3. Interest in teaching, contribution to the supervision of PhD students and training staff
4. Knowledge of report writing for funding bodies
5. Experience of outreach and networking
6. Evidence of strong interest in working in a dynamic research environment, and a strong motivation to succeed within a competitive research field
7. Experience of presenting results in front of peers, meetings or conferences
8. Experience of publishing research
9. A valid DHSSPSNI Licence to conduct animal scientific procedures