

Candidate Information

Position: School/Department: Reference: Closing Date: Salary: Research Assistant Institute for Global Food Security 19/107147 Wednesday 6 March 2019 £27,831 - £32,236 per annum (potential to progress to £35,210 per annum through sustained exceptional contribution) available until 31 January 2020

Duration:

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 an EITFOOD project. This research project is to develop and validate analytical procedures to ensure trust in the seafood supply chain.

MAJOR DUTIES:

- 1. Undertake research to develop and validate immunological methods for the analysis of antibiotics e.g ELISA, LFDs, microarrays or biosensors
- 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. Management of animal colonies including monitoring and maintaining high levels of animal welfare, detailed record keeping and organisation of DHSSPS annual returns for the laboratory.
- 4. Maintenance of cell and tissue cultures.
- 5. Carry out the characterisation of immunological reagents produced using immunological/biosensor for activity monitoring.
- 6. Conduct immunological for target identification when required and undertake the critical evaluations & interpretation of the results.
- 7. Contribute to the evaluation of commercial methods for antibiotic testing in seafood products
- 8. Assist in the set-up of inter-laboratory proficiency tests for the validation of developed immunological methods of analysis as prototype kits
- 9. Present regular progress reports on research to members of the research group, project partners or to external audiences to disseminate and publicise research findings.
- 10. Write up results of own work and contribute to the production of research reports, publications and proposals.
- 11. May contribute to introductory courses, for example, on the use of research methods and equipment.
- 12. Carry out undergraduate supervision/demonstrating/teaching duties under direction.
- 13. Contributing to improving existing lab protocols and introducing new techniques as required.
- 14. 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. Honours Degree or equivalent in biochemistry, chemistry, molecular biology or analytical science or related discipline
- 2. 1 year practical experience in immunological methods e.g. ELISA, LFD, microarrays, biosensors
- 3. 1 year practical experience in cell culture techniques and protein purification systems
- 4. Experience in sample preparation methods for food analysis e.g. extraction of low molecular molecules
- 5. Willingness to contribute to undergrad mentoring and support on research projects within the laboratory setting
- 6. Willingness to contribute to the School and project outreach activities in a professional manner
- 7. Evidence of strong interest in working in a dynamic research environment, and a strong self- motivation to succeed within a competitive research field
- 8. Strong analytical and problem solving skills
- 9. Ability to logically conceptualise and summarise the research findings and data
- 10. Ability to interact with research colleagues and support staff
- 11. Ability to analyse and communicate effectively.
- 12. Demonstrable intellectual ability.
- 13. Must be prepared to work with experimental animals and pass an animal licence training course.
- 14. Must be prepared to work outside normal office hours occasionally.
- 15. Willing to travel to support the dissemination activities at meetings / workshops in Europe

DESIRABLE CRITERIA:

- 1. Working towards a post graduate qualification.
- 2. Home Office Personal Licence
- 3. Knowledge of method development and validation procedures
- 4. Experience in working with animals
- 5. Interest in teaching, contribution to training staff and partners in techniques
- 6. Knowledge of report writing for funding bodies
- 7. Experience of outreach and networking
- 8. Previous experience in large multicentre international research projects
- 9. Experience of presenting results in front of peers, meetings or conferences
- 10. Experience of publishing research in journals or media.
- 11. A valid Licence to conduct animal scientific procedures