Post-Doctoral Fellowship Programme Description

Post Title	**Teagasc Post-Doctoral Research Fellow Level 1 (PD1)**
HR Reference	PD1/VTEC/0619
Research Area	Food Safety
Eligibility	PhD in a relevant discipline with up to 3 years' (max.) relevant experience. The combined total of this contract combined with any other PD1 contracts must not exceed 3 years in total.
Project Title	Surveillance of Verocytotoxigenic E. coli in Ireland: A One Health Approach (VTEC).
Project End Date	30/10/2020
Post Duration	The indicative duration of 11 months, but not exceeding the above project end date, subject to contract.
Location	Teagasc Food Research Centre, Ashtown, Dublin 15.
Reports to	Project Leader or other nominated manager as maybe identified from time to time.
Training Rate	Appointment will be at the minimum point of the Post-Doctoral Level 1 (PD1) scale (€35,678). The current PD1 scale is as follows: PD1: €35,678 (min.); €37,757; €39,529 (max.) Increments will be awarded annually* subject to performance and completion of the prescribed training plan. Note: Exceptional circumstances may apply for candidates with current or previous service in the public sector. *Remuneration and the annual cycle for the payment of increments may be adjusted from time to time in line with Government policy.
Basic Function of the post:	The successful candidate will join a research team conducting research on risk factors for verocytotoxigenic E. coli shedding in ovine animals.

Background*:*

The Teagasc post-doctoral programme provides training and development opportunities for early career scientists that enhances their experience of learning and equips them with the necessary skills for the next stage of their chosen career in research.

This post will be carried out at the Food Safety Department at Teagasc Food Research Centre, Ashtown, Dublin 15 and is part of a national research project on verocytotoxgenic *E.coli* (VTEC) in Ireland. Ruminant animals are considered to be the main source of verocytotoxigenic *E. coli*. However most research efforts have focused on carriage of VTEC in cattle in Ireland with much less attention focused on ovine animals and their role in transmission of pathogenic VTEC. This part of the project will focus on the examination of ovine recto-anal samples for presence and concentration of VTEC using microbiological and real time PCR technology. Meta-data will be collated for all samples and used to establish if there are risk factors for VTEC shedding and/or super shedding events. Additionally, to ascertain the role of the microbiota at the recto-anal colonisation site in VTEC shedding dymanics, swabs taken from selected number of control samples, super shedders and low shedders will be subjected to a 16SrRNA gene-based compositional metagenomics approach.

This is a research focused training role, the primary purpose of which is to provide early career scientists with the opportunity to develop their research skills and competencies. The PD Fellow will,

while working in conjunction with senior research staff, gain insight and experience into a variety of areas including the processes of project and budgetary management, publishing in peer-reviewed academic journals, writing grant applications, and attracting external funding; the development of active collaboration with relevant national and international research communities; the development of communication and presentation skills, leadership and management skills, and overall career development.

Modules will be conducted under the supervision and direction of the (Project Leader) or other designated manager in conjunction with the Head of Department.

Duties & Responsibilities <u>specific to this project</u>:

- Conduct sampling of ovine animals at abattoirs and collation of metadata on samples.
- Conduct real time PCR and microbiological analysis of samples for presence and concentration of VTEC.
- Feed isolates into VTEC national Whole Genome Sequencing platform.
- Conduct metagenomic analysis on samples to ascertain total microbiota composition.
- Collate and report results.

Additional Duties & Responsibilities:

- Interpret research findings and prepare scientific and popular press publications.
- Disseminate research findings to a variety of audiences as appropriate.
- Assist Teagasc in meeting the commitments of the Quality Customer Service Charter and action plan.
- Comply with all relevant Teagasc policies and procedures.
- Fully co-operate with the provisions made for ensuring the health, safety and welfare of themselves, fellow staff and non-Teagasc staff and co-operate with management in enabling Teagasc to comply with legal obligations. This includes full compliance with the responsibilities outlined in the Safety Statement.
- Actively participate in the Teagasc Post Doctoral Fellowship programme and review processes, and to undertake all Post Doctoral fellowship training and associated duties as agreed in the Training & Development Plan.
- Take up additional duties as they may arise and be assigned by management.

Person Specification

This section outlines the qualifications, skills, knowledge and/or experience that the successful candidate would be required to demonstrate for successful discharge of the responsibilities of the post. Applications will be assessed on how well candidates satisfy these criteria.

Essential

- PhD in microbiology or related discipline.
- Relevant research experience not to exceed 3 years' post-PhD.
- Demonstrated research and technical expertise in microbiology.
- Evidence of research activity (publications, conference presentations, awards) and future scholarly output (working papers, research proposals etc.).
- Excellent project management, analytical, report writing and data analysis skills.
- An ability to collaborate with team members and PhD students to help build research knowledge and skill and to guide professional development.
- Excellent communication skills (oral, written, presentation) with an ability to enable effective knowledge and technology transfer.
- Ability to generate new ideas, unique concepts, models and solutions.

Desirable

- Experience in molecular biology.
- Experience in setting own research agenda.
- Evidence of teamwork and collaboration with relevant partners.

Further Information for Candidates

Candidates can access a Fellowship Programme Application form for this post on the Teagasc website at https://www.teagasc.ie/about/opportunities/post-doctoral-opportunities/ Teagasc do not accept Curriculum Vitae's as an application for a position. In order to apply for a post the relevant application form must be completed in order to be considered.

Completed application forms should be TYPED, saved in PDF format and submitted by email to teagascjobs@clark.ie no later than **12 noon on Tuesday 25th June 2019**. Applications received after this time will not be considered.

Teagasc is an equal opportunities employer. As part of Teagasc Gender and Diversity strategies, Teagasc welcomes a balanced pool of applicants. Canvassing will disqualify.

The details contained above are subject to change without notice.