

Teagasc Job Specification

Statistical Geneticist (Ref: SG/MP/0819) (Externally Funded Non Grant-in-Aid)

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| Post Type: | Externally Funded Non Grant-in-Aid contract post, the indicative duration of which is 30 months. A panel may be formed from which future similar vacancies may be filled; such a panel will remain active for a maximum period of 12 months. |
| Location: | Animal & Grassland Research and Innovation Centre, Teagasc, Moorepark, Fermoy, Co. Cork, Ireland. |
| Reporting To: | Project Leader or other nominated manager as maybe identified from time to time. |
| Grade/Salary: | Research Officer, with a starting salary of €33,971 per annum. The current salary scale is €33,971 to €66,118. Remuneration may be adjusted from time to time in line with Government Policy. |
| Basic Function: | The successful candidate will be involved in: <ul style="list-style-type: none">• Derivation of new phenotypes for efficiency and resilience in cattle;• Development and implementation of a national multi-breed genetic and genomic evaluations and breeding schemes for cattle;• Interacting with stakeholders and the Irish and EU cattle industry as a whole on how best to adopt the developed technologies;• Dissemination of knowledge generated to the wider (inter)national scientific community; and• Being part of a larger genetics and genomics animal science team at Moorepark as well as the wider EU project team. |
| Background: | <p>Animal efficiency and resilience to external perturbations are fundamental to ensure global food security without necessarily intensifying the environmental footprint. Achieving these goals however requires optimised breeding programmes that appropriately weigh pertinent definitions of these traits. Moreover, successful breeding programmes are predicated on high accuracy of selection which can be achieved through large-scale data recording or supplementation of traditional genetic evaluation with genomic information. Furthermore, optimised breeding schemes and associated advanced mating plans that exploit genomic information can advance gains further.</p> <p>GenTORE is a Horizon2020 EU project comprising 21 international research bodies with the objective of developing innovative genomic tools to optimise cattle resilience and efficiency. These tools, incorporating both genetic and non-genetic variables, will be applicable across a full range of systems and will thereby increase the economic, environmental and social sustainability of European cattle meat and milk production systems. The multi-actor team will develop tools for multi-breed genomic selection for efficiency and resilience traits, and on-farm management of breeding and culling decisions, and predicting the consequences for farm resilience of changing breeding and management. These tools are designed to be applicable under commercial conditions at the end of the project.</p> |

Main Duties and Responsibilities:

- Develop computer algorithms and pipelines for the successful national implementation of multi-breed genetic and genomic evaluations and associated breeding schemes which will include:
 - Derivation of new and biologically pertinent phenotypes for efficiency and resilience.
 - Development of statistical model for analysis.
 - Estimation of breeding values and validation.
 - Derivation of indexes for ranking of animal on expected future performance.
 - Derivation of weighting factors for traits within the national breeding objective.
- Liaise with international collaborators on multi-breed genomic evaluations.
- Interpret research findings and prepare scientific and popular press publications.
- Disseminate research findings to a variety of audiences as appropriate.
- Comply with all relevant Teagasc policies and procedures.
- Report and discuss progress updates to the Research Project Management Group.
- Assist Teagasc in meeting the commitments of the Quality Customer Service Charter and action plan.
- Actively participate in the Performance Management Development System (PMDS) processes.
- 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.
- Carry out such other duties as may be assigned by the Head of Department, Head of Programme or Director of Research from time to time.

** This job specification is intended as a guide to the general range of duties and is intended to be neither definitive nor restrictive. Job descriptions will be issued with offers of appointment.*

Person Specification

| | Essential | Desirable |
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| Qualifications | <ul style="list-style-type: none"> • Candidates must have a Level 8 degree in agricultural science, genetics, statistics, life sciences or a related discipline. | <ul style="list-style-type: none"> • PhD in a relevant discipline would be an advantage. |
| Knowledge | <ul style="list-style-type: none"> • Agriculture. • Cattle breeding. • Statistics and data analytics. • Genetics and genomics. | <ul style="list-style-type: none"> • Experience in statistical analysis. • Experience in handling of large datasets. • Experience in handling of large genomic datasets. |
| Skills | <ul style="list-style-type: none"> • Demonstrated research and technical expertise in animal genetics and genomics. • Excellent computer programming skills. | <ul style="list-style-type: none"> • Excellent communication skills. • Evidence of research activity (publications, conference presentations, awards) and future scholarly output (working papers, research proposals etc.). |
| Behavioural Competencies | <ul style="list-style-type: none"> • Ability to work on own initiative and to work as part of a team, including consulting, collaborating and building relationships with key stakeholders. • Strives for high quality of work and demonstrates commitment to the programme. • Flexible approach to work with an ability to prioritise tasks effectively. | |

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| | <ul style="list-style-type: none">• Ability to communicate effectively to enable knowledge and technology transfer.• Demonstration of innovation within previous research.• A results-driven individual with a strong focus on goal-setting, performance delivery and accountability. |
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Note: The 'essential' qualifications, knowledge, skills and behavioural competencies outlined above are 'must-have' which will be used in the selection process.

How to Apply

Contact Donagh.berry@teagasc.ie