

TEAGASC PHD WALSH SCHOLARS OPPORTUNITY

“Genetics of ewe survival; breeding for longevity”

Walsh Scholarship Ref. 2023273

Background

On average breeding ewes only stay in the flock for 3.5 lambings. Maximising the number of lambings per ewe over her lifetime ensures output per ewe is maximised while minimising the environmental impact by having less unproductive replacements (Lee et al., 2013). The removal of ewes from a flock maybe classified as voluntary (i.e. poor reproduction or poor production) or involuntary (i.e. death or illness) but both incidences increases the costs associated with purchasing replacements and reduces the efficiency of the overall flock. A trait measuring overall a ewe’s lifetime efficiency, such as ewe survival has also been highlighted by industry stakeholders as one of the most pertinent maternal traits. Despite this, the use of breeding indexes to identify the ewes with the greatest lifetime performance is currently not available to Irish sheep producers.

The objective of this research is to develop a new ewe survival trait for potential inclusion in the national sheep genetic evaluations; in addition genomic analysis will be undertaken to identify genomic regions associated with increasing ewe survival. Results from this PhD will allow for the inclusion of a ewe survival trait in the national sheep genetic evaluations. This research project would expect to yield at least four, international scientific journal articles, in a high ISI ranked applied journal such as the Animal or Journal of Animal Science.

There will be opportunities throughout the programme for professional development training, conference attendance and international travel to expand your research interest.

Requirements

Applicants should have a good primary degree (First or Upper Second Class Honours) or M.Sc. in an appropriate discipline (Animal/agricultural science, Genetics, statistics). The successful candidate should be highly self-motivated and be prepared for field work and statistical analysis of farm data. Fluent English language skills and a full EU driving license are essential. Please see [here](#) for English language requirements.

Award

The PhD is a joint research project between Teagasc and Munster Technological University. The student will be based between Teagasc Athenry and Teagasc Moorepark under the supervision of Dr Fiona McGovern and will work closely with Dr’s Noirin McHugh (Teagasc) and Deirdre Purfield (MTU). The Scholarship will commence in September 2025 (or earlier if that suits). Funding is €25,000 per annum plus University fees of up to a maximum of €6,000 per annum and is tenable for 4 years.

Further Information/Applications

Dr Fiona McGovern, Animal and Grassland Research and Innovation Centre, Teagasc, Athenry, Co. Galway. Phone +353 (0)91845276 email: Fiona.mcgovern@teagasc.ie

Dr. Deirdre Purfield, Department of Biological Sciences, Munster Technological University, Bishopstown, Co. Cork. Phone +353 (0)214326251 email: Deirdre.purfield@mtu.ie

Application Procedure

Submit an electronic copy of Curriculum Vitae and a letter of interest simultaneously to:

Dr Fiona McGovern (fiona.mcgovern@teagasc.ie) and

Dr. Deirdre Purfield (Deirdre.purfield@mtu.ie)

Closing Date: 01st March 2025