



TEAGASC PHD WALSH FELLOWSHIP OPPORTUNITY

"A comparison of Irish versus New Zealand sheep genetics within a grass based production system"

Ref Walsh Fellowship Number: 2017117

Background

National breeding objectives in sheep have been recently established in Ireland, however, the rates of genetic gain recorded to date remain low ($\{0.30/\text{lamb/year}\}$). Rates of genetic gain recorded in the New Zealand sheep industry are considerably higher ($\{0.30/\text{lamb/year}\}$), reflecting a longer established national programme. Previous studies have shown that New Zealand sired lambs had less lambing difficulty, lower costs of production, and finished earlier but had poorer conformation than their UK counterparts, however, to date no comparison of New Zealand and Irish animals selected based on their genetic potential has been undertaken in an Irish grass based system.

The (Ireland New Zealand Across Country Comparison) INZAC flock was established in 2015 comprising of elite Suffolk and Texel females representing the top genetic merit animals under the Irish Replacement Index and New Zealand (SIL-ACE) genetic evaluations across a range of maternal traits; a third group of low genetic merit Irish ewes was also established.

The objective of this PhD is two-fold: 1) to validate the Irish national sheep replacement index and 2) to compare Irish versus New Zealand genetically elite animals. Results from this PhD will be useful to quantify the benefits, of the Irish replacement index in identifying maternal traits and the role of New Zealand germplasm for Irish sheep production systems. This study will involve the collection of a large quantity of routine and novel farm phenotypes and statistical analyses of data.

Requirements

Applicants should have a good primary degree (First or Second Class Honours) in Agricultural Science or related discipline or M.Sc. in an appropriate discipline (Genetics, statistics, animal/agricultural science). The successful candidate should be highly self-motivated and be prepared for field work and statistical analysis of farm data.

Award

The PhD Fellowship is a joint research project between Teagasc, Athenry and University College Dublin. The student will be based primarily in Teagasc Athenry under the supervision of Drs Nóirín McHugh and Fiona McGovern and will work closely with Prof. Tommy Boland in UCD. The Fellowship will commence on 1st October 2017. The fellowship provides a stipend of €22,000. University fees are paid by the student from the stipend which is tenable for 4 years.

Further Information/Applications

Dr Nóirín McHugh, Animal & Grassland Research and Innovation Centre, Teagasc, Moorepark, Fermoy, Co. Cork Phone +353 (0)25 42676 email: noirin.mchugh@teagasc.ie

Prof Tommy Boland, School of Agriculture and Food Science, University College Dublin Phone +353 (0)1 716 7144 email: tommy.boland@ucd.ie

Application Procedure

Submit an electronic copy of Curriculum Vitae and a letter of interest simultaneously to: Dr Nóirín McHugh (noirin.mchugh@teagacsc.ie) and Prof Tommy Boland (tommy.boland@ucd.ie)

Closing date

1st March 2017.