



# TEAGASC PHD WALSH SCHOLARSHIP OPPORTUNITY

“INZAC II: The integration of New Zealand genetics into the Irish national flock”

Ref Walsh Scholarship Number: 2021048

## Background

National breeding objectives in sheep have been established in Ireland, however, the rates of genetic gain recorded to date remain low (€0.30/lamb/year). Rates of genetic gain recorded in the New Zealand sheep industry are considerably higher (€1.00/lamb/year), reflecting a longer established national programme. Previous studies from Ireland, Wales and Northern Ireland have shown that New Zealand sired lambs had less lambing difficulty, lower costs of production, and reached slaughter earlier, however, to date no comparison of New Zealand and Irish animals selected based on their genetic potential has been undertaken to investigate carcass traits 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 investigate the phenotypic and genetic differences observed in animals selected based on their replacement genetic potential 2) to compare pedigree versus crossbred Irish and 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.

## Requirements

Applicants should have a good primary degree (First or Upper Second Class Honours) 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. 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, Athenry and University College Dublin. The student will be based primarily in Teagasc Athenry under the supervision of Dr Fiona McGovern and Dr. Noirin McHugh and will work closely with Prof. Tommy Boland in UCD. The Scholarship will commence in September 2022. Funding is €24,000 per annum and includes 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](mailto:Fiona.mcgovern@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](mailto:tommy.boland@ucd.ie)

## Application Procedure

Submit an electronic copy of Curriculum Vitae and a letter of interest simultaneously to:  
Dr Fiona McGovern ([fiona.mcgovern@teagasc.ie](mailto:fiona.mcgovern@teagasc.ie)) and  
Prof Tommy Boland ([tommy.boland@ucd.ie](mailto:tommy.boland@ucd.ie))

## Closing date

23<sup>rd</sup> September 2022.