

# Animal and Bioscience Department

## Title

Long term sustainable breeding strategies for consistently superior health in cattle

## Abstract

This is a high impact project. The objective of HealthyGenes is to develop and implement a world-class long-term and sustainable breeding strategy for improved animal health in Irish dairy and beef cattle, well beyond the lifetime of this project. This will be achieved through efficient and effective feedback between the individual recording the phenotype and the genetic evaluation system. This project will deliver: 1) animal health data from a range of different sources linked directly to the national database, 2) the generation of knowledge of the genetic parameters and genomic architecture for a range of diseases and their inter-relationships as well as genetic associations with performance traits, and 3) a detailed understanding of the economic impact of compromised health quantified which will be relayed back to producers through decision support tools. The genetic and genomic research will be undertaken from routinely collected data but also through the collection of animal health traits in a well-structured very large dairy cow population. The outcome from this project will be a guaranteed world-class national routine genetic evaluation for a range of animal health traits and their inclusion in the national breeding objectives. HealthyGenes will exploit information and expertise from on-going projects

**Project Leader :** Donagh Berry

## **Programme/Subprogramme/RMIS Number:**

AGRIP - Moorepark Animal Biosciences-Genetic Improvement of Animals-6734

**Start Date** 1/12/14      **End Date** 1/12/18