

TEAGASC PHD WALSH SCHOLARSHIP OPPORTUNITY

“LE-FARM- Strategies to Reduce Ammonia Emissions in Pig Farms”

Walsh Scholarship Ref Number 2022068

Background

One of the main sustainability challenges for the Irish pig sector in the next ten years is the reduction of ammonia emissions. An important component to reduce ammonia emissions is to do some applied research to adapt best available technologies in an Irish context and also to research new technologies that are emerging. Project LE-FARM aims to i) Assess new innovative approaches to reduce ammonia emissions and ii) refine the techniques used to assess emissions. Some of the technologies proposed are a new aeration systems for slurry tanks, the use of covered tanks, solid-liquid separation systems, low emission facilities, feed additives (acidification/stabilisers) and protein reduction (that will be feasible at farm level). Dispersion modelling conducted will allow for a suite of appropriate actions to develop new pig farms in the future. Reducing ammonia production is also important to improve the pig environment with benefits for the health and welfare of the pigs. Following the intention of the European Commission to move towards animal-based indicators for health and welfare, project LE-FARM will develop the first set of animal-based indicators of appropriate ammonia levels in pig facilities. The results of this project will allow the demands for a more sustainable pig production in the EU to be reconciled with the economic and technical constraints that farmers experience. The data collected and the technologies developed will allow Irish pig farmers to carry out upgrades of their farms with confidence that they are contributing to a significant reduction in emissions and the future sustainability of the pig sector.

Requirements

Applicants should have a good primary degree (First or Upper Second-Class Honours) or M.Sc. in an appropriate discipline (Biosystems Engineering, Animal Science, Agri Environmental Science, Engineering & Architecture or similar). The successful candidate should be skilled in coping with challenging situations, be highly self-motivated, be prepared to work in a wide range of situations (lab, farms, stakeholder meetings, meetings abroad) and have an interest in data management and analysis. The work will be carried out mainly in Teagasc Moorepark Cork, but it also involves collaborations with other organizations. Thus, the candidate must be willing to travel to other locations. A full EU driving licence and fluent spoken English is required. Please see the English Language requirements (click [here](#))

Award

The scholarship 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

Dr. Louise Clarke, Pig Development Department, Ballyhaise Agricultural College, Ballyhaise, Co Cavan, email: louise.clarke@teagasc.ie or Associate Prof. Tom Curran, School of Biosystems and Food Engineering, Agriculture and Food Science Centre, University College Dublin, Dublin, email: tom.curran@ucd.ie

Application Procedure

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

Dr. Louise Clarke (louise.clarke@teagasc.ie) and Assoc. Prof. Tom Curran (tom.curran@ucd.ie)

Closing date

1st September 2022