

Understanding Social Acceptance and Support for the Use of Anti-Methanogenic Feed Additives Through Multi-Actor Behavioural Research

Walsh Scholars Reference: 2025208

Research Institution: Teagasc

University: University College Dublin (UCD)

Location: Teagasc Ashtown, Dublin 15, Co. Dublin

Funding: Department of Agriculture, Food and the Marine

Proposed Start Date: September 2026

Project Summary

Ireland's agriculture sector faces increasing pressure to reduce greenhouse gas emissions while maintaining the productivity and sustainability of its grass-based livestock systems. Methane emissions from cattle are a major contributor to agricultural emissions, making methane reduction a key priority in achieving national climate targets. Anti-Methanogenic Feed Additives (AMFA) are emerging as a promising strategy to reduce methane emissions from cattle systems. However, successful implementation will depend not only on scientific effectiveness, but also on how these technologies are perceived and adopted by farmers, industry stakeholders, and the wider public.

While research is ongoing to evaluate the biological and environmental performance of AMFA technologies, less is known about the social, behavioural, and practical factors influencing adoption within Irish farming systems. There is a need to better understand farmer attitudes towards methane mitigation technologies, the barriers and opportunities associated with adoption, and how consumers and industry stakeholders perceive technological change in livestock production. Addressing these challenges is essential to ensure methane mitigation strategies are practical and socially acceptable within Ireland's pasture-based cattle sector.

This Research MSc forms part of the RU-MIT-LESS project, an interdisciplinary research programme funded by the Department of Agriculture, Food and the Marine (DAFM) and led by Teagasc in collaboration with University College Dublin. The student will investigate the human, social, and institutional dimensions of methane mitigation technologies, with a particular focus on AMFA-based feeding strategies. The project will involve engagement with farmers, advisors, industry representatives, and consumers to identify factors that may enable or hinder adoption and to explore attitudes towards climate mitigation technologies.

The project will contribute to the development of practical and socially acceptable methane mitigation strategies that support Ireland's climate objectives while maintaining the viability of grass-based livestock farming. The findings will benefit policymakers, industry stakeholders, researchers, and the wider agricultural sector. The student will gain experience in interdisciplinary research, stakeholder engagement, and agricultural sustainability within a nationally important collaborative research programme.

Supervision

The project will be supervised by Dr Mohammad Mohammadrezaei (Teagasc Climate Centre) and co-supervised by Dr Vilma Xhakollari, Assistant Professor at the UCD School of Agriculture and Food Science. Dr Mohammadrezaei's research focuses on behavioural studies of farmer decision-making related to climate adaptation and mitigation, while Dr Xhakollari brings expertise in agricultural and environmental economics, with a particular focus on policy analysis and sustainability within agri-food systems.

Research Environment

You will be registered at University College Dublin and based within the Agri-Food Business and Spatial Analysis Department at Teagasc Ashtown Food Research Centre, a leading centre for social and behavioural science research in agriculture, for the duration of our studies.

The department plays a central role within the Teagasc Climate Centre, applying advanced behavioural and spatial analysis approaches to understand farm-level climate adaptation and mitigation behaviours. The Climate Centre coordinates climate and biodiversity research across Teagasc and aligns with the Signpost Programme, supporting evidence-based policy development and knowledge transfer to increase adoption of mitigation and adaptation practices at farm level.

As a Walsh Scholar, you will benefit from engagement with national and international research networks, interdisciplinary collaboration, and regular seminars across social science, agriculture, and climate research.

Career and Training Opportunities

The Teagasc Walsh Scholars Programme provides a structured four-year training and development framework designed to support both academic excellence and long-term career readiness. Scholars develop advanced scientific and analytical expertise alongside transferable skills in communication, project management, and stakeholder engagement through expert-led training, workshops, and tailored professional development.

Opportunities are provided to present research at national and international conferences, supporting professional networking and active engagement with the wider research community. Dedicated final-year career supports focus on preparing scholars for impactful roles across research, industry, advisory services, and policy, in Ireland and internationally.

Through the Teagasc International Training Awards, scholars may undertake an international research placement of up to 12 weeks aligned with their PhD project. Outstanding achievement may also be recognised through the Walsh Scholars of the Year and Gold Medal Awards.

Candidate Profile and Eligibility

- We invite applications from students with a variety of disciplinary backgrounds. Applicants should hold a strong primary degree in disciplines such as Agriculture (including Agricultural Extension and Agricultural Economics), Environmental Science, Geography, Psychology, or Sociology. An interest in sustainable agriculture is essential.
- Show the ability to apply multi-actor mixed methods behavioural research
- Demonstrate excellent communication and teamwork skills
- Be willing to travel for fieldwork and engage with farmers, farm advisors, policymakers
- Hold a full, clean driving licence valid in Ireland
- Meet UCD's postgraduate entry and English language requirements

Funding Details

Fully funded 2-year MSc through the Teagasc Walsh Scholars Programme

- €25,000 annual stipend
- University fees covered up to €6,000 per annum

How to Apply

Send the following to Dr Mohammad Mohammadrezaei at mohammad.mohammadrezaei@teagasc.ie, Dr Vilma Xhakollari at vilma.xhakollari@ucd.ie, with the subject line: "MSc Application – Walsh Scholars Ref 2025208" Friday 19th June

Interviews: Shortlisted candidates will be invited to interview in **late June 2026**. Online interviews can be accommodated.

Further Information

Informal queries can be directed to Dr Mohammad Mohammadrezaei at:

mohammad.mohammadrezaei@teagasc.ie

Learn more about the Walsh Scholars Programme at: <https://teagasc.ie/about/research-innovation/the-walsh-scholars-programme/about-the-programme/>