Teagasc PhD Walsh Scholars Opportunity

"Smart Milking for a Sustainable Future"

Walsh Scholars Reference Number 2025009

Background

Irish dairy farms are scaling up and becoming more complex. As herd sizes grow and sustainability demands increase, maintaining milk quality and udder health while meeting environmental, economic, and social goals is an escalating challenge. Smart milking technologies and herd recording systems offer major opportunities, but uptake remains limited due to technical constraints and behavioural barriers.

This PhD tackles those challenges head-on. You will explore how milking machine performance and farmer interactions with technology influence somatic cell count, mastitis control, and the accuracy of milk recording. The research will investigate how innovations in milking can support better decision-making, increase productivity, and reduce antibiotic use.

Combining field trials, data analysis, and stakeholder engagement, the project will deliver practical, evidence-based guidelines for effective use of milking technologies and recording systems. Drawing on international best practice, the findings will be adapted to suit Irish conditions, with the aim of improving herd health, extending cow longevity, and building a more sustainable dairy future

Requirements

Applicants should be highly self-motivated with strong problem-solving and data analysis skills. A primary degree (first or upper second-class honours) in a relevant discipline (e.g. agricultural engineering, animal science, veterinary medicine) is essential. A Master's degree and experience with statistical analysis tools are advantageous. Knowledge of the dairy industry, milk quality control, or milking technology is desirable. A full driver's license is required. For non-native English speakers, minimum language requirements apply: UCD English Language Requirements.

Award

This PhD Scholarship is a joint research project between Teagasc Moorepark and University College Dublin. The successful candidate must be willing to travel between the Teagasc Research Centre at Moorepark, Co. Cork, Ireland and University College Dublin to accomplish both academic and research objectives. The successful candidate will be registered at University College Dublin. The Scholarship will commence as soon as possible after 1st September 2025.

The scholarship funding is €31,000 per annum, made up of a €25,000 stipend per year and University fees of €6,000 per annum and is tenable for 4 years. Auxiliary funds will be available for the student to allocate toward international travel and continued professional development. The student will benefit from structured supervision and targeted research support, joining two world-class research environments and gaining access to specialised training, cutting-edge facilities, and direct engagement with key stakeholders in the dairy and agri-tech sectors.

Application Procedure: Submit an electronic copy of your Curriculum Vitae and a letter of interest simultaneously to: Dr. John Upton (John.Upton@teagasc.ie) and Dr. Eoin Ryan (eoin.g.ryan@ucd.ie).

Closing date: June 30th 2025