



## **PhD SCHOLARSHIP OPPORTUNITY**

### **“Managing Anthelmintic Resistance in Cattle Sustainably”**

**Start Date: October 2024**

#### **Background**

Our pasture-based livestock production system in Ireland ensures animals are continuously exposed to ubiquitous parasites such as gastrointestinal nematodes (GIN), which compromise animal health, welfare and productivity. Our farming system relies heavily of the availability of effective drugs to control these pathogens. However, recent studies have demonstrated the presence of resistant GIN in Ireland. The extent of resistance on Irish sheep farms has been extensively researched; however, the extent of the resistance issue in cattle has received less attention. The goal of this project will be to develop tools and strategies for sustainable parasite control in cattle thereby mitigating the threat of drug resistance.

#### **Project Outline**

This PhD Scholarship will be part of a large, multi-disciplinary project addressing the issue of anthelmintic resistance in GIN of cattle in Ireland. The project will combine veterinary parasitology with new diagnostic technologies, epidemiology and social and behavioural science to design and pilot tailored on-farm intervention and management strategies for the sustainable control of GIN in cattle. The specific objectives of the PhD project are listed below.

#### **Objectives**

- To quantify the extent of anthelmintic resistance in GIN in cattle production systems in Ireland.
- To improve diagnostic testing by developing rapid, cost-effective protocols for evaluating anthelmintic efficacy.
- To identify risk factors for the development of anthelmintic resistance on Irish cattle farms that can be the subject of subsequent risk mitigation activities.
- To identify the barriers to adoption of sustainable parasite control strategies on Irish cattle farms.

In addition to research training in parasitology, epidemiology and social science, the successful candidate will be encouraged to participate in the comprehensive training opportunities offered by Teagasc and UCD and are expected to attend national and international meetings.

**Requirements**

Applicants should have a 2.1 degree or higher in biology, zoology, veterinary, agricultural or natural science or a related subject. Candidates must be enthusiastic and willing to work as part of a multidisciplinary team of scientists.

**Award**

The student will be registered for a higher degree at University College Dublin. The scholarship funding includes a flat rate stipend of €25,000 per annum plus EU University registration fees and is tenable for 4 years. The position will be primarily based at University College Dublin but will work with colleagues in Teagasc, Queen's University Belfast, Animal Health Ireland and the Department of Agriculture, Food and the Marine.

**Further information**

Please contact Prof. Theo de Waal or Dr. Orla Keane for further details using the details below.

**Application Procedure**

Interested candidates should forward a letter of interest and CV, including the contact details of at least two referees.

Prof. Theo de Waal  
UCD  
[theo.dewaal@ucd.ie](mailto:theo.dewaal@ucd.ie)

Dr. Orla Keane  
Teagasc  
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**Closing date:** 12 August 2024