





## TEAGASC PHD WALSH SCHOLARSHIP OPPORTUNITY

"HoloRuminant: Ruminant microbiomes and sustainable production"

## **Ref Number 2020222**

Background: The agri-food sector is Ireland's largest indigenous industry and a key player in the national economy. Sustainability of ruminant production has implications for the environment, the economy and food security. 'Microbiome' is a term that describes the genome of all the microorganisms, symbiotic and pathogenic, living in and on all vertebrates. Microbiomes associated with the host play a key role in health, welfare and environmental efficiency in ruminant production systems. This Walsh Scholarship is part of a large international project called 'HoloRuminant', funded by the EU Horizon 2020 Framework Programme for Research and Innovation (2014-2020). The goal of the project is to elucidate the role of ruminant-associated microbiomes and their interplay with the host in early life and throughout fundamental life events. The project will use a holistic multi-omics approach to characterise the acquisition and evolution of microbiomes from different ruminant body sites and their influence on the host's resistance to disease and environmental efficiency of production. The project will determine microbiomes' functions by combining multi-level information for microbes, host and their interaction; define microbiomes' roles during challenging life periods such as perinatal, weaning, and after exposure to pathogens; and evaluate the effect of ruminant microbiomes on critical phenotypes for sustainable production, health and welfare.

**Requirements:** Applicants should have a primary degree (First or upper Second Class Honours) or an M.Sc. in an appropriate discipline (Microbiology, Animal or Agricultural Science, Veterinary Science, Molecular biology etc.). The successful candidate should be highly self-motivated and be prepared for both laboratory and field work. A full EU driving licence is also required. Proficiency in the English language is required. Please see the following link with regard to English Language requirements https://www.ucd.ie/registry/prospectivestudents/admissions/policiesandgeneralregulations/generalreguirements/minimumenglishlanguagereguirements/

**Award:** The PhD Scholarship is part of a large international project called 'HoloRuminant', funded by EU Horizon 2020. The scholar will be registered at University College Dublin (UCD), but primarily based at the Teagasc Animal and Bioscience Research Department, Grange Co. Meath, Ireland. The scholar will be under the joint supervision of Profs. Sinéad Waters, Bernadette Earley and David Kenny (Teagasc) and Dr. Catherine McAloon, School of Veterinary Medicine, (UCD). 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/Applications:** Further Information/Applications: For further information please email: sinead.waters@teagasc.ie.

**Application Procedure:** Submit an electronic copy of a Curriculum Vitae, which should include a short personal statement and the names and contact details of two referees, by email to: sinead.waters@teagasc.ie or catherine.mcaloon@ucd.ie.

Closing date: 9th July, 2021.