

TEAGASC PHD WALSH SCHOLARSHIP OPPORTUNITY

“Soil Health Indicators”

Walsh Scholarship Ref Number 2021220

Background

Soil health has gained prominence at EU scale with a dedicated mission recently commenced in the area of soil health and food. The EU Soil Mission Board has proposed a set of broad indicators that are considered relevant to provide insight into the state and functionality of soils. The concept of soil health can guide sustainable land management but requires context specific evaluation and testing of soil health indicators across soil types, geoclimatic conditions and management regimes. This Walsh Scholar will test the most relevant proposed indicators in an Irish context to assess their suitability and to identify a first approximation of ranges for the main land use and soil type combinations. A GIS based spatial protocol will be used to identify the main soil, land use and managements to capture the range in terms of the main farming systems across agro-climatic zone. Further, the Walsh Scholar will undertake field and/or lab based controlled experiments to refine/validate the indicators, before implementing an indicative national mapping of soil health indicators. This PhD opportunity is linked with the European Joint Programme on soils (EJP Soil) co-funded SERENA project, offering the Scholar an exciting opportunity to engage with an EU-wide network of researchers working in the area of soils and sustainable land management.

In Ireland, this PhD represents an exciting opportunity to participate in a large multidisciplinary team as part of a cutting edge research programme while exploring a very topical concept at the heart of sustainable agriculture for Ireland. The PhD student will work within the dynamic research teams at Environment, Soil and Land use Department at Teagasc Johnstown Castle in collaboration with the Department of Geography, University College Cork.

Requirements

The candidate should have a 2.1 class honours degree or M.Sc. focused in soils, agriculture, environment, and/or geography. Prior experience of these skills in the context of agri-environmental sciences or other related discipline is advantageous, with experience in GIS desirable. We seek a highly self-motivated candidate with an ability and interest in cooperation with colleagues in other sciences. As the candidate will be required to visit different locations in Ireland for data collection, a full driving license would be advantageous. A minimum level of competency in English is required, click [here](#) to see. The scholar should be available for PhD registration by October 2022.

Award

The PhD student will have the opportunity to work within the dynamic research teams at Environment, Soil and Land use Department at Teagasc Johnstown Castle, Co. Wexford. The PhD scholarship is a joint research project between University College Cork (UCC) and Teagasc. The student will be primarily located at Teagasc (Wexford), and they will be registered at University College Cork (Cork). The student will be working under the supervision of Dr. Paul Holloway (UCC) and Lilian O’Sullivan, (Teagasc – Johnstown Castle). Periods of research work may also be required at various locations around the country.

The scholarship funding is €24,000 per annum including University fees, up to a maximum of €6,000 per annum, and is tenable for 4 years.

Further Information

Dr Paul Holloway Phone + (021) 490 2835; email: paul.holloway@ucc.ie

Lilian O’Sullivan Phone + (053) 917 1333; email: Lilian.OSullivan@teagasc.ie

Application Procedure

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

Paul Holloway email: paul.holloway@ucc.ie and Lilian.OSullivan@teagasc.ie quoting **Walsh Scholarship Ref 2020219** in the email subject line.

Closing date

30 June 2022