



Funded PhD scholarship: Assessing hazards of pesticide use in Ireland for pollinators

Project description: We are seeking a highly motivated and enthusiastic student for a PhD position investigating the impacts of non-insecticide pesticides on the ecologically and agriculturally important bumblebee *Bombus terrestris*. Pesticides are an integral part of modern farming, but there are concerns about their impacts on the environment and in particular their implications for insect pollinators and the services they provide to both crops and wild plants. This project will utilise quantitative proteomics to investigate the molecular effects of specific pesticides (individually and in combination) on the neurological, immunological and metabolic systems of the bee. In addition pesticide effects on bee behaviour and colony productivity will also be investigated.

This position will form part of the PROTECTS (Protecting Terrestrial Ecosystems Through Sustainable Pesticide Use) project, funded by the Irish Department of Agriculture, Food and the Marine under their Research Funding programme. The successful candidate will join the interdisciplinary PROTECTS team consisting of researchers from Maynooth University, Trinity College Dublin, Dublin City University, Teagasc and University College Dublin.

Supervisor: The PhD student will be registered at Maynooth, supervised by Dr Jim Carolan (MU) and co-supervised by Dr Dara Stanley (UCD), and work as part of a collaborative team within the PROTECTS project. The student will register at MU for a 4-year structured doctoral degree programme that includes transferrable skills and professional training.

Award: A tax free stipend of €18,000 per year plus EU registration fees (approximately €6000 pa). Non-EU students are welcome to apply but would require additional funds to cover the fee difference (Non-EU fees currently about €13,360 pa).

Entry requirements: Applicants should hold or expect to hold a Bachelors/Masters degree (2.1 or higher) in a Biological Science related discipline. Given that the project requires working with live bees, experience with insect maintenance is desirable but not essential. Previous research experience and a full driver's license are an advantage. Candidates should be motivated, eager to learn with excellent communication skills. In addition applicants should have the ability to work independently and as part of a team.

How to apply: Please send a cover letter detailing interest in and motivations for the project (max 2 pages) and a CV with contact details of two academic/scientific references (max 3 pages) to Dr Jim Carolan. Please save your documents as a single pdf and send via email to james.carolan@mu.ie all the reference **PROTECTS18** in the subject header.

Expected start date: September 2018

Closing date for applications: 25th July 2018