Closes Friday 5th November 2021

Expected start date: January 2022

With this doctoral research programme will be a 4-year structured PhD (https://www.ucd.ie/graduatestudies/) based at University College Dublin (Dublin, Ireland), the appointed student will be working in a diverse team of scientists with post graduate students, postdoctoral researchers and more senior principal investigators conducting research on biodiversity conservation and management, climate change, ecological networks, and the resistance and resilience of ecosystems to perturbations.

This PhD is funded through a Science Foundation of Ireland funded project entitled “Delivering food security from grasslands by understanding the link between root microbial networks and resilient agriculture”. The main goal of this SFI project is to understand how linkages between the ecology below-ground and the ecology above-ground control grassland productivity and resilience under the stresses of extreme drought and flood. The PhD project will focus on the response of plant communities (e.g. species richness and relative abundances) to combined extreme drought and flood in grasslands and will involve field surveys, and field and glasshouse experiments. The project will also involve statistical modelling with a focus on connecting the plant community to microbial communities in soils and plant roots. The project also offers resources to visit research partners based in Germany, the Netherlands and Italy and also funding to attend national and international conferences.

The following selection criteria will be applied to applications.

Essential:
- Hold an undergraduate or taught Masters degree in an appropriate discipline (e.g. ecology, zoology, botany, conservation, environmental sciences) with at least a 2:1 grade (or equivalent)
- Demonstrated aptitude and motivation for independent research in ecology, especially field work and plant ecology
- Full driving license
- Ability to organise, participate and undertake fieldwork
- Aptitude for plant species identification and use of species identification keys

Desirable:
- Community ecology analytical skills (e.g. multivariate statistics)
- Experience in grass taxonomy
- Experience in molecular ecology

The successful applicant will be invited to register for a structured PhD programme at University College Dublin and will be supervised by two academics at UCD with the external collaboration of one academic at Trinity College Dublin.

The studentship cover an annual PhD stipend €18,500 per annum and full tuition fees for EU residents.
Applicants should submit a cover letter and cv to Dr Tancredi Caruso (tancredi.caruso@ucd.ie) by Friday 5th November 2021.