Post highlights

Post Title: Postdoctoral Researcher.
Post Status: Specific purpose contract, 18 months duration.
Location: Trinity College Dublin, Ireland.
Reports to: Professor Caroline Brophy.
Closing Date for applications: 26th July 2023.
Anticipated Start Date: 1st September 2023.
Salary: This appointment will be made on the SFI New Post-Doctoral Researcher scale (Level 2A, October 2023) (€42,782 - €49,177 per annum) on a point commensurate with experience, plus funding for training and conference travel.

How to apply: Applications are submitted by email; full details below.

Job Summary

This post is a Postdoctoral Researcher in Statistics position to collaborate on the LegacyNet project. LegacyNet is an international project investigating the role of species diversity in agronomic grassland leys within crop rotations. There are 31 sites across Europe, Asia, New Zealand, and Canada and the experiment is either completed or is at an advanced stage at each site. The Postdoctoral Researcher will join the Statistics Team of the LegacyNet project and will collaborate with the international network of LegacyNet members. LegacyNet is led by its three Directors: Professor Caroline Brophy, Dr John Finn, and Dr Carsten Malisch. Further details about LegacyNet are available on the LegacyNet website: https://legacynet.scss.tcd.ie/.

The Postdoctoral Researcher will collaborate on collating the LegacyNet database (this work is already ongoing), and they will develop and apply statistical models to the LegacyNet data. They will also develop online tools to 1) communicate and facilitate end users to use the statistical approaches, 2) promote the associated experimental designs, and 3) to communicate and disseminate the modelling results on a farm scale. The LegacyNet project has two phases: a grassland ley phase and a follow-on crop phase (full details of the project and common experiment are available on the LegacyNet website). During the grassland ley phase at each site, 52 experimental plots were established across a gradient of species diversity of up to six species, and measured for a minimum of 18 months. The six species included two grasses, two legumes and two herbs. The Postdoctoral Researcher will develop and apply statistical models to investigate the persistence of the three functional groups during the grassland ley phase. They will also investigate the impact of changes in functional group structure in the grassland ley phase on outcomes in the follow-on crop phase.

The Postdoctoral Researcher will also collaborate with members of the LegumeLegacy Maire-Curie Doctoral Network (https://legumelegacy.scss.tcd.ie/) on which Professor Caroline Brophy is lead
coordinator. This project brings together Principal Investigators and collaborators from 13 academic and industry partners from across Europe and one Canadian partner. LegumeLegacy will hire and train 11 Doctoral Researchers and will implement a research programme aimed at improving the sustainability of farm-scale crop rotations.

The Postdoctoral Researcher will be based in the School of Computer Science and Statistics at Trinity College Dublin, Ireland and will report to Professor Caroline Brophy. They will also be a member of the ADAPT SFI Research Centre, led by Trinity College Dublin.

**Standard duties and responsibilities of the post**

- Contribute to the construction and quality control measures of the LegacyNet database.
- Develop appropriate statistical methodologies for analysing the LegacyNet data.
- Develop online tools for end users to understand and use the statistical methodologies and associated experimental designs.
- Participate in dissemination of the research outcomes of LegacyNet, including the preparation of journal publications and presentation of the work at national and/or international conferences.
- Participate in delivering training events to doctoral researchers working on the LegacyNet, LegumeLegacy and related projects.

**Qualifications and skills for the position**

**Qualifications**
- A PhD in statistics, data science or closely related discipline.

**Skills and experience**
- Experience of working with and managing real world datasets.
- Varied statistical modelling experience, including experience of developing models for non-standard situations.
- Strong programming skills using statistical software.
- Experience teaching Statistics to undergraduate or postgraduate university students, or delivering Statistics training events in a non-university setting.
- Excellent writing and communication skills, with an ability to collaborate within a multi-disciplinary and international research team. Non-native English speakers require at least IELTS 6.5 (with at least 6 in all components) or equivalent.
Application process

Applications should be compiled into a single pdf document. The pdf document should include:

- A maximum 2-page cover letter outlining your suitability for the post, with reference to relevant qualifications or experience.
- Detailed curriculum vitae, including qualifications and experience, publications and the name and email contacts of two academic referees.
- Transcripts of degrees held.

The pdf document should be sent by email to Professor Caroline Brophy at caroline.brophy@tcd.ie. Do not include additional documents and do not include substantive information in the body of the email.

For the subject of your email, please use: ADAPT-TCD LegacyNet Postdoc application – [your surname]

The deadline for applications is 26th July 2023.

Please note that applicants that do not follow these guidelines may not be considered for shortlisting.

Benefits

Benefits of working at Trinity College Dublin include:

- Competitive salary
- Flexible working arrangements
- Pension
- Day Nursery
- Bike to Work Scheme
- Sports Facilities
- Paid Sick Leave
- Travel Pass Scheme

Diversity

The School of Computer Science and Statistics at Trinity College Dublin is a proud recipient of a Bronze Athena Swan award, attained in 2021. As part of the School’s on-going actions in relation to equality, diversity and inclusion, it welcomes all applications that meet the eligibility and qualifications criteria and particularly those from under-represented groups.
About Trinity College Dublin

Trinity College Dublin, the University of Dublin is Ireland’s leading university, one of the top ranked universities in Europe and a member of the League of European Research Universities. It is currently ranked 81st in the QS World University Rankings 2024. Founded in 1592, the University is steeped in history with a reputation for excellence in education, research, and innovation.

Located on an iconic campus in the heart of Dublin’s city centre, Trinity has 18,000 undergraduate and postgraduate students across our three faculties – Arts, Humanities, and Social Sciences; Science, Technology, Engineering and Mathematics; and Health Sciences. The pursuit of excellence through research and scholarship is at the heart of a Trinity education, and our researchers have an outstanding publication record and strong record of grant success.

About the ADAPT Science Foundation Ireland (SFI) Research Centre

ADAPT is the world-leading SFI research centre for AI Driven Digital Content Technology hosted by Trinity College Dublin, Ireland. ADAPT’s partner institutions include Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Athlone Institute of Technology, and the National University of Ireland Galway. ADAPT’s research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion, and accountability with the long term goal of a balanced digital society by 2030. ADAPT is pioneering new Human Centric AI techniques and technologies including personalisation, natural language processing, data analytics, intelligent machine translation human-computer interaction, as well as setting the standards for data governance, privacy and ethics for digital content.