



JOB DESCRIPTION

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| Research Centre | DCU Water Institute School of History and Geography, School of Chemical Sciences |
| Post title | Postdoctoral Researcher in freshwater ecology and citizen science |
| Level on Framework | Level 1 |
| Post duration | 21 months |

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education, and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

As part of this role the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Background & Role

The DCU Water Institute (WI) is a cross-faculty initiative of research and education on water. It aims to work with all stakeholders – a quadruple helix of academia, industry, agency and society in its research and development work. Through research and capacity building, the WI develops solutions to national and global problems in water. We specialise in technology developments across science, engineering and computer science domains with strong communications focus and policy and business drivers. These areas are reflected in our academic members in DCU, across all faculties of the University.

The School of History and Geography is an ambitious, research-intensive School in the Faculty of Humanities and Social Sciences. While possessing and promoting an international perspective, the School has a particular focus on Ireland – its geography, history and landscape. The combining of History and Geography has created a School that is unique in Ireland in its interdisciplinary range and research potential, and that is well positioned to play a leading role, nationally and internationally, in the disciplines of History, Geography and Irish Studies. Both History and Geography are offered on the Bachelor of Arts: Joint Honours programme, where they are consistently among the most popular subjects. The School offers an innovative BA in Climate and Environmental Sustainability and also teaches History on the Bachelor of Religious Education and History. At postgraduate level both subjects offer a PhD programme; the School delivers an MA in History and contributes to the MSc in Climate Change: Policy, Media and Society. The School has a growing and dynamic postgraduate community.

The postdoctoral researcher will support the Irish Research Council Coalesce-funded project 'Urban Citizen's 632'. This project aims to create a scalable model to gather data on water quality in areas where there is currently a data gap, through citizen scientist and community-based monitoring of streams and rivers within the terrestrial area of the UNESCO Dublin Bay Biosphere.

This project will encourage local communities to monitor water quality at a greater scale than previously reported in these water bodies, and will encourage stewardship of these by the communities who engage with them directly. Increased monitoring can aid the identification of contamination sources, and can prevent contamination events. It can also help to change attitudes in local communities to these green corridors that flow through the urban environment, and promote environmental sustainability.

The mission of Urban Citizen's 632 is to provide a scalable Citizen Science Programme which will address water quality (through citizen science monitoring of nutrients and macroinvertebrates)

in surface water in Dublin city and suburbs, through community-based monitoring and citizen stewardship of urban and suburban rivers and streams. Along with citizen scientists, we will gather monthly data to complement and complete data being collected by the EPA and by the local authorities. The successful candidate will work with community groups and project partners to roll out the nutrient monitoring programme, and train the citizen scientists in macroinvertebrate monitoring.

The successful candidate will work with the two Principal Investigators, Dr Susan Hegarty and Prof. Fiona Regan to conduct this research. Alongside Dr. Hegarty (School of History & Geography) and Prof Regan (School of Chemical Sciences, Director of DCU Water Institute), the successful candidate will produce comprehensive evaluation reports, a summary report of key findings and peer-reviewed journal articles.

Principal Duties and Responsibilities

Reporting to the Principal Investigator and working as part of the team, the duties and responsibilities include but are not restricted to the following:

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator
- Assist in identifying and developing future research and funding initiatives
- Engage in the dissemination of the results of the research in which he/she is engaged with the support of and under the supervision of the Principal Investigator
- Teach, supervise and assist undergraduate students working in this area with their research, where appropriate
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University
- Liaise with both internal and external stakeholders including industry, community groups and academic partners/collaborators
- Carry out administrative work associated with the programme of research as necessary

Minimum Criteria

Applicants should have a PhD in freshwater ecology, environmental science, or related discipline, and have a knowledge of freshwater macroinvertebrates. In addition, it is desirable that the candidate has experience in GIS and working with community groups / wider public on environmental projects. As the successful candidate will be required to visit field sites, a driving licence will be required.

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications

Communicating Research – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students