



JOB DESCRIPTION

Research Centre	National Institute for Cellular Biotechnology
Post title	Research Fellow in Protein Mass Spectrometry
Level on Framework	Level 2
Post duration	Fixed term contract up to 11 months

Dublin City University

Dublin City University (DCU) is a young, ambitious and vibrant university, with a mission 'to transform lives and societies through education, research, innovation and engagement'. Known as Ireland's 'University of Enterprise', DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education.

DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU's pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world's Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

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.

National Institute for Cellular Biotechnology

The National Institute for Cellular Biotechnology (www.nicb.ie) is a multidisciplinary centre for research on human cell biology and medicinal chemistry, with emphasis on research with application to cancer, diabetes, obesity, ocular diseases and the biopharmaceutical industry. It features advanced core facilities in proteomics, microscopy and mammalian cell culture, housing a large collection of human cell lines. The NICB prioritises translational research involving collaborations with industry and with clinicians.

Role Profile

We are seeking a Research Fellow to join a growing research group. The role will involve the proteomic and mass spectrometry analysis of Chinese hamster ovary (CHO) cells, the principal host cell line used in biopharmaceutical production of biotherapeutics. The role will also involve the characterisation of biotherapeutic products (e.g. monoclonal antibodies) using advanced protein mass spectrometry techniques. Experience in protein analytical and protein mass spectrometry techniques is essential for the role.

Principal Duties and Responsibilities

Reporting to the Principal Investigator the Postdoctoral Researcher will:

- Conduct, with a very high degree of technical ability, a specified programme of research under the supervision and direction of the Principal Investigator
- Conduct proteomic analysis of mammalian cells used for biopharmaceutical production
- Develop methodology for analysis and quantitation of post-translational modifications of cellular proteins using mass spectrometry
- Communicate research efforts, including compiling reports, participation in the generation of manuscripts and presenting findings at group meetings, national and international conferences
- Take part in supervision of postgraduate students as required
- Supervise and assist undergraduate students working in this area with their research
- Assist in identifying and developing future research and funding initiatives
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University
- Engage in teaching and teaching support as assigned by the Head of School under the direction of the Principal Investigator
- Collaborate with both internal and external stakeholders including industry and academic partners/collaborators
- Carry out administrative work associated with the programme of research as necessary

Minimum Criteria

- The successful candidate will have a PhD in biochemistry/bioanalytical sciences or equivalent.
- Four years of postdoctoral research experience or equivalent experience is required

In addition to the above it is desirable that the candidate possess a subset of the following skills and experience.

- Experience in proteomics and protein analytical techniques
- Experience in mass spectrometry for protein/peptide analysis and characterisation

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates the ability to design and implement part of a programme of research (for example by using critical thinking and the application of relevant research methodologies).

Understanding the Research Environment – Demonstrates a thorough understanding of the research environment both nationally and internationally and the ability to contribute substantially to grant applications.

Communicating Research – Demonstrates the ability to communicate their research effectively to the research community and wider society (for example by publishing their research in high quality peer reviewed journals) and the ability to teach and tutor students.

Managing & Leadership skills - Successfully manages research projects including the management and supervision of postgraduates and/or junior research staff.

Essential Training

The post holder will be required to undertake the following essential compliance training: Orientation, Health and Safety and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.