



JOB DESCRIPTION

Associate Professorship/Professor in Biotherapeutics

**School of Biotechnology
Faculty of Science & Health
Permanent**

Introduction

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.

School of Biotechnology

The School of Biotechnology (www.dcu.ie/biotechnology) is the academic unit that leads biological sciences, life sciences, biotechnology and bioprocess engineering education and research within the Faculty of Science & Health at Dublin City University (DCU). The School delivers both undergraduate B.Sc [Genetics and Cell Biology (GCB), Biotechnology (BT), Bioprocessing (BP), Environmental Science & Technology (EST) and Analytical Science for Biologists (AS)] and taught M.Sc postgraduate degree programmes [Biotherapeutics (MBT), Bioprocessing Engineering (MSBE), Diagnostics and Precision Medicine (MDPM)] in addition to the education and training of research MSc and PhD students under its structured PhD programme, *BioTranslate*. It is an active centre of basic, applied and multi-

disciplinary research, supporting clusters of intersecting research themes which link closely with the School's teaching programs. The School is now home to the [Microbial Bioprocessing Facility \(MBF\)](#), a facility that is equipped with fully automated bioreactors ranging in size from 3.7 L to 150 L, and a [GMP-like high potency biotherapeutic manufacturing facility](#). The School and associated research centres offer core facilities and technical support in the areas of Cell and Molecular Biology, Bioprocessing, Cell Imaging, Nanobiophotonics, Analytical Characterisation and Proteomics. Research output falls into the general categories of Life Science or Industry-associated activity in the domains of Health/Ageing/Disease, Precision Health, Biodesign, Bioprocess Engineering, Environmental Science and Sustainability. They bring together a critical mass of multidisciplinary researchers that are strategically positioned to pursue national and international opportunities for research and innovation. The excellence of the School's research is reflected by funding success from many national and international sources (including direct funds from industry) and the quality of its published and other research outputs.

Role Profile

The successful candidate should have a Ph.D in a science related discipline with an excellent track record of scholarly achievement and research leadership on the practical uses of molecular advances in the discovery of proteins and other biologic drug candidates and their development into biotherapeutics with demonstrable experience in undergraduate and/or taught postgraduate teaching and learning in one or more of the following disciplines:

Biotherapeutic Development
Antibody/Protein Engineering
MultiOmic Technologies
Cell & Molecular Biology

Biochemistry/BioPhysics
Computational Biology
Upstream and Downstream Processing of
Biologics

The candidate should have a comprehensive understanding of the development of biotherapeutics, beginning with pre-clinical modelling and target identification together with protein/antibody engineering and/or extracellular vesicle (EV) production, biochemical and biophysical characterisation, and development issues for bioprocessing.

Prior experience must include an excellent publication track record detailing first/senior author original publications in peer-reviewed high impact journals, explicit evidence of securing independent extramural funding from National and International funding agencies and an educational background to deliver modules in the area of Biotherapeutics commensurate with an Associate Professor/Professor grade. Please see 'Qualifications and Experience' below for a further breakdown of the essential and desirable criteria required for this position.

The post-holder will make a substantial contribution to the continuous development and delivery of the School's taught Masters and PhD research programmes in Biotherapeutics. Through excellent leadership, the post-holder will continuously develop a world-class collaborative and high-impact postgraduate research programme in Biotherapeutics, training future leaders, positioning the School and DCU as an international leader in Biotherapeutics.

The duties of the post fall within *DCU's Academic Development and Promotions Framework* (<https://www.dcu.ie/hr/DCU-Academic-Development-Promotion-Framework.shtml>) and the principles of the *School's Academic Workload Model* with activity across the domains of teaching, research and administration and are in line with DCU's strategic plan "*Talent, Discovery and transformation: 2017-2022*".

Duties and Responsibilities

The duties and responsibilities of the position include, but are not restricted to, the following:

Teaching and Learning

The individual will support the delivery of curriculum content to our key undergraduate B.Sc programmes in Biotechnology (BT), Genetics and Cell Biology (GCB), and Bioprocessing (BP), and our taught M.Sc postgraduate taught degree programmes in Biotherapeutics (MBT), Bioprocessing Engineering (MSBE) and Diagnostics and Precision Medicine (MDPM). The School is committed to a flexible mode of module delivery across all of its programmes and the successful candidates will be expected to develop on-line components to their assigned modules.

Research:

The individual will contribute to our strategic goal of advancing our reputation for world-class research by supporting a programme of research that falls within the broad theme of 'Biotherapeutics', which includes activity in the domains of cell and molecular biology, protein/antibody engineering, computational biology, genomics, vascular biology, cancer biology, immunology and neurobiology, microbial pathogenicity, diagnostics and therapeutics. In addition, the post holder will be expected to have a demonstrable independent research profile and the ability to secure grant awards from national/international funding agencies and/or industry to fund their research activities which would include the recruitment of both postgraduate students and postdoctoral research fellows; contribute to existing School and DCU-wide research initiatives and expand their collaborative network within DCU, nationally and internationally.

Service and Contribution to the University and Society:

The post holder will be required to undertake administrative roles related to the activities of the School of Biotechnology and the Faculty of Science & Health as assigned by the Head of School. These roles may include but are not limited to the following: Programme Chair; School Executive member; Convenor roles (teaching, research or international), Faculty Management board, Marketing, Safety Committee, Open Days, Conference organisation, Work Placement Tutoring. Participation in courses provided by the University designed to develop skills in such areas as teaching, management and safety will also be expected.

Qualifications and Experience

Essential Criteria:

- Candidates must hold a Ph.D in the general area of Biological Sciences, with a particular focus on Biotherapeutics and their development, including cell and molecular biology, computational biology, protein engineering, biochemical and biophysical characterisation, and/or development issues for upstream and downstream bioprocessing.

- Evidence of teaching ability/quality in the area Biotherapeutics at undergraduate and/or postgraduate level
- Evidence of obtaining extramural funding as a Principal Investigator (PI) and/or Co-Investigator (COI) from National or International funding agencies
- Have a publication record that includes first/senior author peer-reviewed original high impact publications in their research area with associated KPIs commensurate with an Associate Professor/ Professor grade
- Have an active research profile that demonstrates research career independence and impact
- Excellent written and verbal communication and interpersonal skills
- Proven ability to prioritise workload and work to strict deadlines

Desirable Criteria:

- Prior experience in the areas of biotherapeutics either in academia or industry
- Prior experience in contributing to School or university level committees/projects.
- Prior experience in contributing to School research strategy, School level boards and School based roles and workplace supervision.
- Prior experience in teaching into multiple programmes in one academic year.