

## **Job Description**

# Assistant Professor in Biotechnology School of Biotechnology Faculty of Science & Health Fixed Term Three Year Contract

#### 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 Bioprocess Engineering, Environmental Science and Sustainability in addition to Health/Ageing/Disease, Precision Health, Biodesign. 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.

# Relationships

Reporting to the Head of School, the appointee will work closely with other colleagues, the Teaching Convenor/Associate Dean of Teaching and Learning and industry partners. Building positive relationships with professional support staff and technical and pedagogy specialists and engagement with key stakeholders within and outside of DCU is an important part of this role.

#### The Role

The appointee will be expected to assist the School in implementing an innovative curriculum project, specifically

- developing and delivering a new bachelors degree programme in Bioprocessing ensuring an industry engaged, research-led approach, integration of challenge based learning, digital tools and hybrid delivery.
- broader implementation of teaching approaches into other target programmes in the school, and
- engaging with university-wide elements of the initiative including cross faculty cooperation, project evaluation and reporting.

## **Duties & Responsibilities**

To support the new HCI program, the B.Sc in Bioprocessing, the School now plans to make an appointment at Assistant Professor level.

The role includes teaching, supervision of laboratory sessions, student mentoring and supervision of taught projects and research.

Specifically, the successful individual will be required to (inter alia):

#### Teaching:

Prepare, deliver and assess a range of core subjects in a manner consistent with DCU's high academic standards and in a hybrid environment which involves campus and elements of remote delivery. Teaching extends to assisting innovation in curricula development. Typical activities include

- Contributing to the design and development of new programmes.
- Developing and delivering new or reconceptualised modules and resources.
- Designing and assessing examinations and other types of coursework.

- Using a wide range of teaching and assessment methodologies which foster a deep approach to learning and equip students with the skills and attributes needed to be lifelong learners including challenge based learning and concentrated and immersive learning experiences.
- Co-designing with other academics and industry partners a suite of tools and initiatives that support
  the transversal skills pathway and embedding transversal skills development, diagnostics and
  assessments into new and existing programmes.
- Supervision of laboratory sessions, and student mentoring.
- Proactive engagement with the renewal of existing courses and programmes.
- Engagement with professional development for teaching particularly in that related to the approaches embedded in the project.

#### Research:

The successful individual will be expected to sustain and conduct research, engage in scholarship of quality and substance, generate research income, supervise postgraduate students and publish to the highest international standard both individually and, where appropriate, in collaboration with colleagues in DCU and elsewhere. The appointee will be expected to have clearly articulated research interests and research profile development plans that support the school's current research priorities, and which will underpin senior modules and projects related to the new Bioprocessing degree programme.

## Contribution to the school, Faculty, university and profession

Examples include:

- Engagement with planning, quality review and improvement processes, and external programme accreditations
- Involvement with appropriate professional bodies and associated initiatives.
- Development and delivery of the international activities of the School including international travel to do so.
- Adoption of some administrative functions related to the activities of the School, the Faculty, and
  the wider University. Such duties will be defined by the Head of School and may include some of the
  following: degree programme coordination; participation in committees; visits to students on
  industrial placement within the DCU INTRA programme; student recruitment.

# **Qualifications and Experience**

#### **Essential criteria:**

- Individuals must hold a Ph.D in the area of Chemical Engineering/BioProcess Engineering, Biochemical Engineering, Environmental Engineering or Brewing and Distilling.
- Have an active research profile that demonstrates a pathway to future research independence such as Fellowship, Co-Investigator, Collaborator and/or Principle grant applications to date.
- Evidence of teaching ability/quality in the area of Bioprocess Engineering at Undergraduate and/or postgraduate level.
- Have a publication record that includes first/senior author peer-reviewed original publications in their research area as appropriate for career stage.
- Candidates should demonstrate excellent interpersonal and communication skills consistent with the highest quality of teaching and learning, together with evidence of successful teamwork and a collegial approach.

# **Essential Training**

The postholder will be required to undertake the following essential compliance training: Orientation, Health & Safety, Data Protection (GDPR) and all Cyber Security Awareness Training. Other training may need to be undertaken when required.



