



**Research Centre:** The Vascular Biology & Therapeutics Group, School of Biotechnology

**Post Title:** Postdoctoral Researcher in the Stem Cell Biology

**Level on Framework:** Level 1

**Post Duration:** 12 months

**Overview:**

Dublin City University [www.DCU.ie](http://www.DCU.ie) 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 and Transformation', it is committed to the development of talent, and the discovery and translation of knowledge that advances society and the economy. DCU is the Sunday Times Irish University of the Year 2021.

The University is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. It currently has more than 18,000 students 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 creating a transformative student experience, and its positive social and economic impact. This exceptional commitment on the part of its staff and students has led to DCU's ranking among the top 2% of universities globally. It also consistently features in the world's Top 100 Young Universities (currently in QS Top 70 Under 50, Times Higher Top 150 Under 100).

DCU is placed 84th in the world, in the Times Higher Education University Impact Rankings – measuring higher education institutions' contributions towards the UN Sustainable Development Goals. Over the past decade, DCU has also been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

**Background and Role:**

The EVPRO project (Extracellular Vesicles Promoted Regenerative Osseointegration) aims to counteract the shortened lifetime and to reduce the risk of inflammation of hip revision prostheses. To this end, we are developing a novel bioinspired adaptive coating for hip revision endoprosthesis, which is able to control inflammation at the original anatomical location of the removed endoprosthesis and promote bone regeneration. We seek to achieve this by safe integration of human mesenchymal stem cell derived extracellular vesicles (MSC-EVs) into a smart biodegradable hydrogel which is absorbed into the micro pores of a TiO<sub>2</sub> coating on the surface of conventional titan endoprosthesis.

An EU funded post-doctoral position in cell and molecular biology is available to join the Vascular Biology and Therapeutics Group in the School of Biotechnology. The successful candidate will join the team to generate and characterise human mesenchymal stromal stem cell-derived extracellular vesicles (MSC-EVs) from cells grown in long-term cultures using hollow-fibre bioreactors (HFBRs).

**Research Career Framework:**

As part of this role the researcher will be required to participate in the DCU Research Career Framework (<http://dcu.ie/hr/ResearchersFramework/index.shtml>). This framework is designed to provide significant professional development opportunities to researchers and offer the best opportunities in terms of a wider career path.

DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which you can advance your academic career.

**Duties and Responsibilities**

Please refer to the job description for a list of duties and responsibilities associated with this role.

**Minimum Criteria:**

The successful candidate must hold a PhD in Cell Biology. In addition, it is desirable that the candidate has a subset of the following skills / experience:

- Experience with processing, exploration and visualisation of EV data.
- Ability to work individually and as part of a multidisciplinary team.
- Excellent organisational and problem solving skills and a proven ability to communicate effectively.
- Experience working on research projects; working closely with laboratory scientists and industrial partners

**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

**Mandatory Training:**

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

**Salary Scale:**

Postdoc Researcher salary scale - €38,631 - €50,030

Appointment will be commensurate with qualifications and experience and in line with current Government pay policy

**Closing date:** 7 May 2021

**For more information on DCU and benefits, please visit [Why work at DCU?](#)**

**Informal Enquiries in relation to this role should be directed to:**

Professor Paul A Cahill, Chair of Vascular Biology & Therapeutics, School of Biotechnology, Faculty of Science and Health, Dublin City University.

Email: paul.cahill@dcu.ie

Please do not send applications to this email address, instead apply as described below.

**Application Procedure:**

Application forms are available from the DCU Current Vacancies website at

<https://www.dcu.ie/hr/vacancies-current-vacancies-external-applicants> (external applicants)

Applications should be submitted by e-mail with your completed application form to

[hr.applications@dcu.ie](mailto:hr.applications@dcu.ie)

**Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1502 Postdoctoral Researcher in the Stem Cell Biology**

*Dublin City University is an equal opportunities employer.*

*In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.*

*The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the [DCU Policy Starter Packs](#)*