



Research Centre	National Institute for Cellular Biotechnology
Post title	Postdoctoral Researcher Level 1
Level	Level 1
Post duration	Fixed-term contract up to 24 months

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 record in attracting both Irish and European Union research funding under Horizon 2020 (and previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your career.

Background & Role

The NICB (www.nicb.dcu.ie) is a multidisciplinary centre of research in fundamental and applied cellular biotechnology and molecular cell biology. It includes a multidisciplinary team of Cell and Molecular Biologists, Biotechnologists, Chemists and Computer scientists.

A postdoctoral position is available with the Cancer Biotherapeutics/Molecular Therapies for Cancer in Ireland group within the NICB at Dublin City University (DCU) to undertake research on the following project: "Pre-clinical assessment of a small molecule tyrosine kinase inhibitor for the treatment of breast cancer".

Specifically, the project will evaluate the ability of a c-erbB-family-targeting small molecule tyrosine kinase inhibitor (TKI) to overcome innate and acquired resistance in cell culture and *in vivo* models of HER2+ breast cancer. Proliferation studies will be used to identify chemotherapy/TKI combinations with potential for the treatment of HER2+

breast cancer. Mechanistic studies will be undertaken to assess the basis of acquired resistance to the TKI in cell line resistance models developed by the candidate. Promising TKI/chemo combinations will be evaluated *in vivo*. The impact of the TKI on the immune response will also be assessed.

This project is an academia/industry collaboration. The project will be co-supervised by Dr. Denis Collins, Cancer Biotherapeutics, DCU and Prof. John Crown, St Vincent's University Hospital/DCU.

Principle Duties and Responsibilities

The Postdoctoral Researcher will be required to fulfil the following:

- Carry out all experimental objectives as specified in the project.
- Document all experimental data, analyses and protocols.
- Report/present regularly at group meetings.
- Attend relevant meetings, seminars and conferences.
- Contribute to manuscript preparation relevant to the project.
- Complete a detailed report upon completion of the project.
- Undertake standard laboratory management tasks.
- Monitor and report on project budget expenditure.
- Undertake other tasks as defined by the project leaders, Dr. Denis Collins and Prof. John Crown.

Minimum Criteria

The successful candidate will hold a PhD in the area of cancer biology or a related discipline.

Mandatory experience:

- Cell culture: maintenance and quality control
- Bioanalytical skills (RT-qPCR, flow cytometry, western blotting, ELISA)
- *In vitro* methods of determining cell growth, cell cycle progression and cell death mechanisms
- Cell signalling pathway interrogation

- *In vivo* rodent tumour models and drug delivery

Desirable experience:

- Immunohistochemistry
- Development of drug resistant cell line models
- Transient transfection of cancer cell lines
- Antibody-dependent cell-mediated cytotoxicity (ADCC) assays

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 and technical staff

Salary: €36,854 p.a

Closing date: 21 March 2018

Informal enquiries to: Dr. Denis Collins

E-mail: denis.collins@dcu.ie Phone: +353 (0)1 700 5647

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 (open Competitions) website at <http://www.dcu.ie/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

Please clearly state the role that you are applying for in your application and email subject line: Job 807 Postdoctoral Researcher, NICB

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: hr.applications@dcu.ie

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