



Research Centre National Institute for Cellular Biotechnology (NICB)

Post title Research Fellow

Level on the Framework Level 2

Post duration Fixed Term up to 7 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.

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.

The Animal Cell Biotechnology group at NICB focus their research on understanding the molecular mechanisms underpinning recombinant protein productivity in Chinese Hamster ovary (CHO) cells. These cells are the dominant platform for the production of Biopharmaceutical drugs, e.g. monoclonal antibodies. These new drugs hold great promise in treating various diseases but currently are very expensive to produce in large quantities. By improving the ability of the CHO producer cells to make and secrete these proteins we hope to contribute to reducing this cost.

Specifically we apply 'omics technologies (proteomics and transcriptomics) to discover the networks of genes impacting on CHO cell phenotypes relevant to the bioreactor environment. Our ultimate goals are: 1) to identify genes as potential genetic engineering targets for improved Biopharmaceutical yield from CHO cells 2) to identify biomarkers useful for predicting the future behaviour of CHO cells in culture and 3) to better understand the molecular mechanisms involved in various industrially-relevant phenotypes, e.g. fast growth rates, resistance to apoptosis.

Recently much of this focus has been in the area of miRNA biology. These small, non-coding RNA molecules represent a critical regulatory layer within the cell at the post-transcriptional level and have great potential as pathway engineering targets.

The successful candidate will be expected to take a leadership role in an exciting, SFI-funded research program implementing cutting edge molecular biology techniques to manipulate the

expression of target RNAs in CHO cells including using targeted genome engineering techniques such as CRISPR/Cas9 technology.

Principal Duties and Responsibilities

- Manage and conduct a specified programme of research in collaboration with the Principal Investigator
- Supervise and assist postgraduate and other students working in in the PIs research group
- Manage to day to day running of the PIs research group at NICB
- Identify and develop future research and funding initiatives
- Engage in the dissemination of the results of the research in which he/she is engaged on behalf of the Principal Investigator
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators

Minimum Criteria

Applicants must have a PhD in Molecular Cellular Biology or related discipline and a minimum of 4 years relevant postdoctoral research experience or equivalent at Level 1 of the Research Career Framework. In addition, it is necessary that the candidate has considerable experience in molecular biology techniques including gene cloning, sequence analysis and manipulation. Practical experience with mammalian suspension cell culture for the production of recombinant therapeutic proteins is desirable. Experience with manipulating miRNA expression and epigenetic modification of RNA would also be beneficial.

Experience with managing undergraduate and postgraduate students and postdoctoral scientists with varying degrees of experience are desirable.

Salary: €52,716 p.a

Closing date: 5th January 2018

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

Application Procedure:

Application forms are available from the DCU Current Vacancies (External Competitions) website at <https://www.dcu.ie/hr/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

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

Please clearly state the role that you are applying for in your application and email subject

line: Job Ref#736 Research Fellow, National Institute for Cellular Biotechnology (NICB)

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