Background:
This is an opportunity to join a Marie Skłodowska Curie Initial Training Network (eCHO Systems) as an ESR focused on the improvement of recombinant protein production (Biopharmaceuticals) in Chinese Hamster ovary (CHO) cells. This is a large EU Horizon 2020-funded program that will employ 15 ESRs in total to complete their PhD training on various aspects on CHO cell molecular and systems-level biology. The network consists of 4 Academic institutions from across Europe and more than a dozen industry partners. A more detailed overview of the ITN can be found at http://www.echo-systems.eu/

This ESR will be registered on the PhD program at Dublin City University within the National Institute for Cellular Biotechnology (NICB, http://www.nicb.dcu.ie/research_cho_home.html), under the supervision of Dr. Colin Clarke and Dr. Niall Barron. The ESR will also spend a short secondment at ACIB, Vienna in Austria.

Project Title: **Computational analysis of non-coding RNA meditated posttranscriptional regulation in CHO cells**

Objectives:
- To develop bioinformatics pipelines to analyse long non-coding RNA (IncRNA) and microRNA (miRNA) expression patterns from RNA-seq data.
- To identify correlations between individual miRNA and IncRNA expression profiles, various cellular metabolic profiles and CHO culture conditions.
- To integrate a variety of data types to study CHO post-transcriptional regulatory networks

Expected Results:
- Characterisation of miRNAs and non-coding RNAs whose expression is indicative of cell phenotype
- Development of novel bioinformatics and statistical methodology for CHO cell RNA-seq data and data integration.
Minimum Criteria
Applicants must have an MSc degree in bioinformatics. Experience in computer programming, statistics and next generation sequencing are desirable. Good communication skills in English, both written and spoken.

Salary: Marie Curie ESR Salary will be in the range of €37,903 - €42491 p.a., before taxes, as determined by EU guidelines.

Conditions
As a Marie Curie Early stage-recruiter, you shall at the time of recruitment be in the first four years (full-time equivalent research experience) of your research career and have not yet been awarded a doctoral degree. At the time of recruitment, you shall not have resided or carried out your main activity (work, studies etc.) in the country of the host institution (Ireland) for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays are not taken into account.

Closing date: 11th March 2015

Informal enquiries to:
Dr Colin Clarke, NICB, DCU (NIBRT)
E-mail: colin.clarke@dcu.ie

Please do not send applications to this e-mail address, instead apply as described below.

Application Procedure:

Applications should include a CV (with 3 references) and covering letter, explaining why you are interested in pursuing a PhD in this area, and be submitted with the application form as outlined below.

Application forms are available from:

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.

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.

Dublin City University is an equal opportunities employer