Dublin City University  
Faculty of Science and Health  
School of Biotechnology  
Postdoctoral Researcher in Immunology  
(Funded by Enterprise Ireland)  
(15 Month Contract)

Project description:
The project is funded by Enterprise Ireland under their Commercialisation fund. This project builds on the recent discovery by the PI (at DCU) and her collaborator, that a compound purified from Marine origin has a specific molecular target, Mal, which conveys anti-inflammatory activity. Mal is a protein that is involved in a key pathway in the immune system, the toll-like receptor (TLR) pathway. There are a number of TLRs and they each recognise a different class of pathogen and subsequently activate the immune system. Mal is exclusively associated with TLR2 and TLR4 which play a major role in inflammatory disease. The specificity of the molecular target provides the opportunity for the targeting of inflammation in a range of disease states, but also allows for the normal functioning of much of the immune defence against infection. This is due to the fact that other TLRs do not use Mal and can therefore respond to a wide range of pathogens normally. To date rigorous experiments in vitro have been performed and one of the key focuses of the project is to provide the first proof that the compound has anti-inflammatory activity in vivo by examining its activity in a murine model of inflammation.

Role:
The role of DCU in this project is to determine if the identified marine compound has anti-inflammatory activity in vivo in a model of inflammation. Furthermore, a number of derivatives of the compound will be generated by the collaborators at UCD and DCU will also screen these both in vitro and in vivo. Another key role for DCU will be in the execution of the commercial work package.

Qualifications and Experience:
Applicants for the position of Post-doctoral Researcher must have a PhD in a relevant discipline (e.g. Immunology). Experience in primary cell culture, flow cytometry and working with in vivo models are all necessary.
Description of duties for Postdoctoral Scientist:

1. The postdoc will establish *in vitro* and *in vivo* models necessary to carry out the aims of the EI project.
2. The postdoc will liaise with other researchers working on the EI project at UCD to consolidate the research effort.
3. The postdoc will be expected to contribute to all reporting for EI.
4. The postdoc will be expected to contribute to all commercial and technical work packages being led by DCU.
5. The postdoc will be expected to interact with PhD students within the research group at DCU.
6. The postdoc will be expected to keep an accurate account of his/her work in a designated lab notebook.
7. The postdoc will be expected to carry out research to enhance other projects in the lab when necessary.

Informal enquiries to:

Dr Christine Loscher, School of Biotechnology, DCU E-mail: christine.loscher@dcu.ie

Phone: 353 (0)1 7005244

Salary Scale: €37,750 - €43,643

*Subject to qualifications and experience*

Closing Date: 3rd August 2012

Application forms are available from:

[http://www.dcu.ie/vacancies/APPLICATION FORM 8pg.doc](http://www.dcu.ie/vacancies/APPLICATION FORM 8pg.doc) and from Human Resources Department, Dublin City University, Dublin 9. Tel: (01) 700 5149; Fax: (01) 700 5500

Email: hr.applications@dcu.ie

*Dublin City University is an equal opportunities employer*