Research Centre: School of Chemical Sciences / National Centre for Sensor Research (NCSR)

Post title: Postdoctoral Researcher in Membrane Biophysics

Level on Framework: Level 1

Post duration: Fixed Term Contract up to 16 months

Research Career Framework:
As part of this role the researcher will be required to participate in the DCU Research Career Framework [http://www.dcu.ie/hr/ResearchersFramework/index.shtml](http://www.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.

Overview:
The National Centre for Sensor Research (NCSR) is a large, multidisciplinary research unit based in state-of-the-art facilities situated on the campus of Dublin City University. Arising from success in recent proposals we are now seeking application for the following research position in DCU.

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 and Role:
We are seeking an enthusiastic and talented postdoctoral scientist with a background in experimental membrane biophysics to work as part of a multidisciplinary team on a project focused on development of microfluidic prototypes of artificial cell membrane models for drug discovery applications. The candidate must have experience in preparing lipid bilayer membranes on solid supports and in their biophysical characterization. Experience in one or more of the following: electrochemical methods, fluorescence microscopy and/or Raman microscopy and associated data analysis is essential.

*The duration of this role will be up to 16 months.*
**Principal Duties and Responsibilities**

Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Conduct, with a very high degree of technical competence a specified programme of research and scholarship under the supervision and direction of the Principal Investigator
- Contribute towards the development of a commercial prototype within an IP restricted project
- Within the constraints of IP protection of the project, disseminate the outcomes of the research in which he/she is engaged including funder reporting, industrial demos and publishing in high quality peer reviewed journals of international standing.
- Support the PI and research group in the design and development and implementation of the broader research programme.
- Support as required, the development of proposals for research funding.
- Take responsibility as requested for day-to-day advice and support of graduate research students associated with your research group.
- Mentor, assist and train as appropriate and as directed, the research graduate students and more junior postdoctoral fellows within the group.
- Contribute to reporting, site visit preparation and other administrative management work associated with your programme of research and the research group
- Contribute to teaching and outreach activities of the group.
- Liaise with stakeholders such as industry and collaborators.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University
- Carry out administrative work associated with the programme of research as necessary

**Minimum Criteria**

The candidate must have a PhD in biochemistry, chemistry or physical chemistry and significant experience in preparation and analysis of lipid membrane models, such as supported lipid membranes, GUVs and/or proteoliposomes.

The candidate should have experience in electrochemical impedance spectroscopy applied to lipid membrane models and/or experience in fluorescence microscopy methods particularly in FCS and FLIM, applied to study of membrane dynamics is also highly desirable.

The candidate should be capable of working independently with a high degree of technical competence whilst also being a team player, he/she must demonstrate initiative, be hard working, versatile and productive. S/he should have good communication and organisational skills.

**Salary:** *€36,488 to €38,750*

*Appointment will be commensurate with qualifications and experience.*
Closing date: 31 January 2018

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.

Informal enquiries to:
Professor Tia Keyes, School of Chemical Sciences, DCU, Dublin 9, Ireland
E-mail: tia.keys@dcu.ie Phone: +353 (0)1 7005298

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

**Application Procedure**
To apply for this role, applications should include a CV and covering letter and be submitted with the application form to the Human Resources Department as outlined below.

Application forms are available from the DCU Current Vacancies (open Competitions) website at [https://www.dcu.ie/hr/vacancies/current.shtml](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 650A Postdoctoral Researcher in Membrane Biophysics.*

*Dublin City University is an equal opportunities employer*