



## PhD Studentship

### **New liquid chromatography-tandem mass spectrometry methods for drug monitoring**

**Leicester School of Pharmacy, Faculty of Health & Life Sciences,  
De Montfort University, Leicester**

**STARTING JANUARY 2014**

A PhD research studentship covering stipend and tuition fee costs is available within the Faculty of Health and Life Sciences working with an internationally recognised research team that has pioneered micro-analytical methods for a range of healthcare applications. It is available to suitably qualified UK or EU students.

Cardiovascular disease is one of the biggest killers worldwide affecting 1 in 3 people in the UK. Current care of such patients and increasingly for patients over 50 years old is the prescription of a combination of cardiovascular drugs. Good patient recovery depends on the combination of clinical skills and adherence with drug therapy. In cases of poor clinical outcomes it is essential to the clinical decision making process that the level of adherence is assessed.

The project is on the development of a simple non-invasive test to assess adherence to cardiovascular therapy in primary and secondary care. It will involve developing novel liquid chromatography-mass spectrometry methods and their application to a healthcare setting. Sample collection for such a test would be via dried blood spots (DBS) in which a drop of blood is collected on a card non-invasively. Sampling can be carried out at a clinic, or within a pharmacy or by the patient themselves. The assay of the target drugs or metabolites would be carried out initially using LC-HRMS techniques. This project will include the development, validation and application of novel DBS based analytical methods for therapeutic drug monitoring purposes.

This multidisciplinary project will give the student excellent training in LC-MS/MS techniques, clinical pharmacy practice, handling patient samples, data generation and reporting.

Good laboratory and instrumental skills are essential. Other essential requirements are the ability to handle and manipulate blood samples. Experience of using HPLC and/or LC-MS systems is desirable.

For a more detailed description of the studentship project please visit our web page: [www.dmu.ac.uk/dried-blood-spot](http://www.dmu.ac.uk/dried-blood-spot) or contact Dr S. Tanna on +44 (0)116 2078274;

email [stanna@dmu.ac.uk](mailto:stanna@dmu.ac.uk), or Dr G. Lawson on +44 (0) 116 2577129; email [glawson@dmu.ac.uk](mailto:glawson@dmu.ac.uk)

This research opportunity builds on our excellent achievements in the past and looking forward to REF2014 and beyond. It will develop the university's research capacity into new and evolving areas of study, enhancing DMU's national and international research partnerships.

Applications are invited from UK or EU students with a good first degree (First, 2:1 or equivalent) in a relevant subject and a keen interest in bioanalysis. Doctoral scholarships are available for up to three years full-time study starting January 2014 and provide a bursary of £13,770pa in addition to university tuition fees.

To receive an application pack, please contact Research Student Officer Claire Kaylor-Tilley via email at [ckaylor-tilley@dmu.ac.uk](mailto:ckaylor-tilley@dmu.ac.uk). Completed applications should be returned together with a full CV and two supporting references.

Please quote ref: DMU Research Scholarships 2012

**CLOSING DATE: Friday 27<sup>th</sup> September 2013**