



## *School of Pharmacy PhD Projects 2014*

**Project Title** The role of FKBPL in cancer and other diseases

**Supervisors** Prof Tracy Robson and Dr Helen McCarthy

**Description** We have demonstrated that FKBPL is as an important anti-tumour protein, inhibiting both tumour blood vessel development and treatment resistant cancer stem cells; a therapeutic peptide based on this protein is about to enter phase I cancer clinical trials. More recently, we have been studying the functional role of FKBPL using gene knock-out models, shedding further light on the endogenous role of FKBPL. Data suggest that FKBPL may have an important role in the pathophysiology of other diseases.

Further characterization of this gene/protein in other disease settings is therefore justified and will provide a PhD student with an intellectually challenging project covering a wide range of cell and molecular biology based techniques.

This project brings together the expertise of the Experimental Therapeutics Research Cluster and collaborators within the pharmaceutical industry. The student will therefore learn a wide range of skills. This interdisciplinary approach will allow a full evaluation of potentially valuable, novel therapeutic targets that could lead to commercial exploitation. The project also has the important benefit of using well-tried methodologies which have already generated a prodigious flow of data. The student can rely on a similarly large amount of data arising from this study.

**Start Date** 1 October 2014

**Keywords** Cancer, cell biology, molecular biology, therapeutic drug, knock-out models, angiogenesis, cancer stem cells.

### **Contact Details**

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### **How to Apply**

Postgraduate applications should be made using Queen's Online:

<http://go.qub.ac.uk/pgapply>

Please note that there are two application processes: one for admission to the university and another for postgraduate awards.

### **Further Information**

Additional information for prospective postgraduate students can be found on the School of Pharmacy website:

<http://www.qub.ac.uk/pha>

and the Queen's Postgraduate website:

<http://www.qub.ac.uk/home/ProspectiveStudents/PostgraduateStudents/>