



## School of Pharmacy PhD Projects 2014

- Project Title** Targeting microRNAs as diagnostic and therapeutic solutions for chemoresistant epithelial ovarian cancer (EOC).
- Supervisors** Dr Fiona Furlong and Professor Tracy Robson
- Description** Ovarian cancer is the leading cause of death for women presenting with a gynaecological malignancy worldwide. Despite a significant initial response to chemotherapy, fewer than 20% of women will become long-term survivors. Our previous research demonstrated that the aberrant expression of a microRNA renders ovarian cancer cells more resistant to Taxol® chemotherapy and identified a network of proteins that contribute to the chemoresistant phenotype. This PhD studentship will investigate the potential of this microRNA to predict chemo-resistance in patient samples. By employing routine *in vitro* cell culturing techniques, gene knockdown and assays to determine response to chemotherapy, we will investigate the potential of targeting this microRNA to reverse chemoresistance and specifically eradicate chemoresistant ovarian cancer cells. The successful candidate will carry out their studies as part of the Experimental Therapeutics Research Cluster. S/He will benefit from the wide ranging technical skills of researchers in the cluster, the School of Pharmacy and from our industry collaborators, and employ a number of well-established methodologies that have contributed to numerous publications and patent applications. This interdisciplinary approach will ensure that the commercial potential arising from this project is fully explored.
- Start Date** 1 October 2014
- Keywords** microRNA, cancer, Biomarker, drug discovery

### 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/>