



**QUEEN'S
UNIVERSITY
BELFAST**

*Title of studentship	Investigation of novel RNA mediators of breast and ovarian cancer
Value / what is covered?	unfunded
Awarding body	Self-funded
Number of studentships	2
*Summary descriptive text / Example of research project	Recent research by my laboratory group has focused on the identification of the methylation of RNA with a focus on methylated microRNA as novel diagnostic or drug targets of breast and ovarian cancer. Very little is currently known about the structure, function and activity of methylated RNA in cancer providing exciting opportunities for ground-breaking research. A typical project in my research group involves the culture of cancer cell lines and the evaluation of cell responses by a range of cytotoxicity measurements, cell imaging and functional assays to measure cell migration, immune signalling activity or drug responses to chemotherapy. We apply gene over-expression and gene knock out methodologies to interrogate underlying cell signalling mechanisms. Studying for a PhD in my group will provide you with the opportunity to present your data at international conferences and publish in reputable peer reviewed journals. Moreover, this research has the potential to uncover new diagnostic and drug targets for breast or ovarian cancer.
*Supervisor(s)	Fiona Furlong
*Eligibility / residence Status	open
Country	Northern Ireland
*Start date and duration	1 October 2018 No less than three-year full-time PhD.
*Faculty	MHLS
*Research centre / School	Pharmacy
Subject area	Cancer biology, molecular biology, cell biology
Candidate requirements / Key skills required for the post	Applicants should have a 1st or 2.1 honours degree (or equivalent) in a relevant subject. Relevant subjects include Pharmacy, Molecular Biology, Pharmaceutical Sciences, Biochemistry, Biological/Biomedical Sciences, Chemistry, Engineering, Psychology, Social Sciences or a closely related discipline. Students who have a 2.2 honours degree and a Master's degree may also be considered, but the School

	reserves the right to shortlist for interview only those applicants who have demonstrated high academic attainment to date
*Deadline for applications	open
*How to apply / contacts	<p>Postgraduate Research applicants for Pharmacy who are interested in applying for a fully funded DFE studentship must have applied to Queen's, via the Direct Applications Portal, and submitted all required supporting documents by the closing date, which will be announced later in the Academic year.</p> <p>https://dap.qub.ac.uk/portal/user/u_login.php</p>
Relevant links / more information	<p>http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/PostgraduatePositions/</p> <p>http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/</p>
Keywords for search filters	Breast cancer, ovarian cancer, microRNA, chemotherapy,
Training provided through the research project	RNA, DNA and protein isolation, qRT-PCR, western blot, gene silencing, gene over expression, <i>in vitro</i> analysis e.g. cytotoxicity analysis, cell migration, protein activity assays, cell signalling, cell imaging, microRNA analysis, RNA methylation analysis. Patient studies.
Expected impact activities	Presentation at national and international conferences. Publication in peer review journals.