



# QUEEN'S UNIVERSITY BELFAST

<b>*Title of studentship</b>	Development of novel drug delivery devices for sustained/controlled release of nanoparticles to the vaginal mucosal tissue
<b>Value / what is covered?</b>	Self-funded
<b>Awarding body</b>	Self-funded
<b>Number of studentships</b>	1
<b>*Summary descriptive text / Example of research project</b>	There is considerable interest in using nanoparticle technology to administer drug and vaccine candidates to the mucosal tissue of the human vagina, particularly for vaccine and microbicide applications targeted at preventing sexual transmission of HIV in women. However, to date, it has not been possible to administer nanoparticles to the vagina in a sustained or controlled release fashion. In this project, the overall aim is to develop and test new vaginal ring prototypes that offer for the first time the potential for sustained/controlled release of nanoparticles to the vagina. The research group at Queen's University Belfast is world renowned for its knowledge, expertise and application of vaginal ring technology.
<b>*Supervisor(s)</b>	Prof. Karl Malcolm, Dr. Peter Boyd & Prof. Helen McCarthy
<b>*Eligibility / residence Status</b>	UK, EU or International applications welcome.
<b>Country</b>	Northern Ireland
<b>*Start date and duration</b>	Anytime
<b>*Faculty</b>	MHLS
<b>*Research centre / School</b>	Pharmacy
<b>Subject area</b>	Pharmaceutics, Drug Delivery, Formulation
<b>Candidate requirements / Key skills required for the post</b>	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
<b>*Deadline for applications</b>	Anytime
<b>*How to apply / contacts</b>	<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><a href="https://dap.qub.ac.uk/portal/user/u_login.php">https://dap.qub.ac.uk/portal/user/u_login.php</a></p>
<b>Relevant links / more information</b>	<p><a href="http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/PostgraduatePositions/">http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/PostgraduatePositions/</a></p> <p><a href="http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/">http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/</a></p>
<b>Keywords for search filters</b>	Drug delivery, controlled release, sustained release, vaginal ring, formulation development, mucosal vaccination, HIV microbicides
<b>Training provided through the research project</b>	The successful applicant will be integrated into a large group of experienced researchers with access to world-leading facilities. The student will benefit from a broad training in many aspects of the pharmaceutical sciences, including nanoparticle preparation, formulation development, laboratory-scale device manufacturing, drug product testing and analytical method development.
<b>Expected impact activities</b>	