



# QUEEN'S UNIVERSITY BELFAST

<b>*Title of studentship</b>	Identifying drug targets to combat <i>Acinetobacter baumannii</i> infections?
<b>Value / what is covered?</b>	Fully funded  100% of UK/EU tuition fees paid and an annual stipend for UK residents only (living expenses), currently at £14,777
<b>Awarding body</b>	DFE
<b>Number of studentships</b>	1
<b>*Summary descriptive text / Example of research project</b>	<i>Acinetobacter baumannii</i> is a problematic cause of intensive care unit infections due to its rapid development of multidrug resistance, as well as its formation of highly antibiotic and biocide tolerant biofilms which facilitate its long term survival on surfaces. We have identified protease inhibitors which impede <i>A. baumannii</i> biofilm formation from a high throughput screen. and these represent promising anti-biofilm therapeutics. However, their mode of action is unclear as they are designed to inhibit C13 proteases and no prokaryotic C13's have been characterised to date. We have identified a C13 in <i>A. baumannii</i> which likely represents the target for these inhibitors and the overall aim of this project is to confirm this protein is the target for these inhibitors, that it is required for biofilm maintenance and represents a C13 protease.
<b>*Supervisor(s)</b>	Dr James Burrows, Prof Brendan Gilmore
<b>*Eligibility / residence Status</b>	UK/EU only
<b>Country</b>	Northern Ireland
<b>*Start date and duration</b>	1 October 2019 Funding covers a three-year full-time PhD.
<b>*Faculty</b>	MHLS
<b>*Research centre / School</b>	Pharmacy
<b>Subject area</b>	Antimicrobial strategies
<b>Candidate requirements / Key skills</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, or a

<b>required for the post</b>	closely related discipline.
<b>*Deadline for applications</b>	7 <sup>th</sup> January 2019
<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>	<i>Acinetobacter baumannii</i> , antimicrobial, biofilm, protease
<b>Training provided through the research project</b>	The student will have the opportunity to learn a range of molecular biology, protein biochemistry and microbiology related techniques as well as developing transferable skills such as written and verbal scientific presentation skills.
<b>Expected impact activities</b>	