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| **\*Title of studentship** | Drug-eluding Wound Care Products using Deep Eutectic and Reactive Extrusion |
| **Value / what is covered?**  | Fully funded  100% of UK/EU tuition fees paid and an annual stipend for UK residents only (living expenses), currently at **£15,285** |
| **Awarding body** |  |
| **Number of studentships** | 1 |
| **\*Summary descriptive text / Example of research project**  | Surgical site infections (SSIs) cause severe problems and remain a major cause of postoperative mortality, particularly at incision sites that are considered ‘dirty-contaminated’ according to the CDC Surgical Wound Classification (SWC Class IV). The incidence of SSIs at Class IV wound sites has been reported to be over 27% in general and can be as high as 40% in extreme cases such as in abdominal laparotomy and intestinal procedures, particularly colostomies. Occurrence of SSIs may result in repeat surgeries, use of systemic antibiotics and, prolonged hospital stays with an estimated additional healthcare costing of up to $60,000 per patient.This project aims to develop drug-eluting surgical wound-care products for improved post-surgery recovery, using cutting-edge enabling technology and continuous production (reactive extrusion). The study will build upon preliminary data and knowledge acquired from previous work within the group. |
| **\*Supervisor(s)** | Dr Shu LiProfessor Gavin P Andrews |
| **\*Eligibility / residence Status** | Both home and international |
| **Country** | Northern Ireland |
| **\*Start date and duration**  | September 2022 |
| **\*Faculty** | MHLS |
| **\*Research centre / School** | Pharmacy |
| **Subject area** | Pharmaceutical science/pharmaceutics/pharmaceutical engineering |
| **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, Pharmaceutical Sciences, Biochemistry, Biological/Biomedical Sciences, Chemistry, Engineering, 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** | August 20222 |
| **\*How to apply / contacts** | Postgraduate Research applicants must have applied to Queen’s, via the Direct Applications Portal.<https://dap.qub.ac.uk/portal/user/u_login.php>  |
| **Relevant links / more information**  | <http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/PostgraduatePositions/><http://www.qub.ac.uk/schools/SchoolofPharmacy/Research/> |
| **Keywords for search filters** |  |
| **Training provided through the research project** | General technical training within the labs on instruments required for the projectTraining on scientific writing through generation of progress reports, literature review(s), research article(s), conference presentations (abstracts, posters, slide decks)Communication skills Presentation skillsTime management skillsCoordination skills |
| **Expected impact activities** | Attendance and dissemination at both national and international conferencesPublication of both literature review papers and research articlesFollow-up funding application process |