



School of Pharmacy PhD Projects 2013

Project Title Development of TCR-conjugated nanoparticles as a novel targeted drug delivery system for the treatment of cancer

Supervisors Prof Chris Scott and Dr Dan Longley

Description This project brings together arguably the two most exciting current therapeutic areas in cancer, namely immunotherapeutics and nanomedicine in a joint collaboration between Queen's University Belfast (QUB) and Immunocore Ltd (Oxford). At QUB we have an established interest in the application of polymeric nanoparticles to improve the efficacy and safety profile of chemotherapies and have developed technologies to enhance tumour targeting through ligand grafting on the nanoparticle surface. Immunocore have developed propriety monoclonal TCR (mTCR) complexes which can be used to target and bind specifically to tumour specific antigens displayed on the surface of diseased cells. In this prestigious fully funded 4 year research studentship, funded by the Medical Research Council, the potential to exploit these mTCR complexes to act as targeting ligands on nanoparticles will be investigated for diagnostic and therapeutic capabilities. This project will offer training in cancer biology and complex tumour models, immunotherapy, nanomedicine and protein engineering. The project will be co-supervised by QUB and Immunocore, and the student will be expected to undertake an extended work placement with the industrial partner, offering them a unique training experience bringing together academic and industrial insight into the development of new cancer therapeutics. We invite applications from high caliber individuals with a 2.1 or higher degree in biochemistry, pharmacy or related discipline, preferably with a Masters.

For further details contact Chris Scott at c.scott@qub.ac.uk

Start Date Sept/Oct 2014

Keywords Biochemistry, Cancer, immunotherapeutics, nanomedicine

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/>