**Postdoctoral Research Opportunity**

**Institution:** Institute for Global Food Security (IGFS), Queen’s University of Belfast, UK

**Reference:** 16/104915

**Closing Date:** Monday 7 November 2016

**Salary:** £32,004 per annum

**Anticipated Interview Date:** Monday 28 November 2016

**Duration:** 2 years with possibility of extension (subject to funding)

**Link for applying online**:

<https://hrwebapp.qub.ac.uk/tlive_webrecruitment/wrd/run/ETREC107GF.open?VACANCY_ID=7910237DQe&WVID=6273090Lgx&LANG=USA>

**Background**: Queen’s University researchers at the Institute of Global Food Security (IGFS), working closely with the agri-food sector in Northern Ireland have received funding for research into the rapid diagnosis of antimicrobial resistance (AMR).

AMR is considered a global health problem and a major industrial challenge in the livestock sector. Currently available AMR diagnostics have several shortfalls, including the need for expensive laboratory-based equipment and the length of time required for analysis. This 2 year project will develop a rapid, cost-effective prototype device that can be used on-farm to identify pathogens and their antimicrobial resistance patterns. The project will further provide an invaluable, real-time, pen-side diagnostic and decision-making advice to veterinarians and farm managers for combating the grand societal challenge of antimicrobial resistance on a global scale.

**Qualification**: The successful applicant should have a PhD degree in Chemical Engineering, Clinical Microbiology, Biomedical Engineering or related disciplines. Experiences with pathogenic bacteria detection using either advanced micro- and nanotechnology or paper-based microfluidic devices will be considered as an advantage. The candidate should demonstrate evidence of independent research capability, excellent communication and writing skills, an interest in working in a dynamic research environment, and a strong motivation to succeed within a competitive research field.

**Assessment:** The assessment of the applicants will be made by an assessment committee chaired by Dr. Cuong Cao. All applications will be reviewed to generate a short list of candidates. Potential candidates will be contacted for interview.

Further information may be obtained from Dr Cuong Cao, +44 (0)28 9097 6545, c.cao@qub.ac.uk