



Name:	Lorna L. Dawson		
Project title:	The use of oral fluids from pig populations for early diagnosis and monitoring of infectious disease		
Institute:	Newcastle University		
Start date:	October 2011	Finish date:	September 2014
Lay summary of project (<i>in your own words</i>)			
<p>At present, the diagnosis of infectious disease in pigs is expensive and laborious. Individual blood samples are taken from a small sample of the population and tested in the laboratory. Tests can detect the pathogen directly, or antibodies produced against a pathogen, which indicates past exposure. Oral fluid is a combination of saliva, plus additional secretions which originate in the blood stream. Viruses, bacteria and antibodies against these can be detected in swine oral fluid by making alterations to existing test protocols designed for blood. US researchers have developed such tests for a range of key disease agents significant to the pig industry including Porcine Reproductive and Respiratory Syndrome virus (PRRSv) and Porcine Circovirus Type 2 (PCV-2). This project aims to develop oral fluid diagnostics for the detection of European strains of PRRSv, and Salmonella infection in UK pig herds. We will also look at how to get good quality oral fluid samples that truly represent the total population for large group sizes.</p>			
A bit about yourself			
<p>I was born and raised in Newcastle and graduated with an MSci. in Biomedical Sciences from Newcastle University in 2011. I have always been fascinated by disease dynamics and particularly the interplay between human and animal health and disease. The opportunity to begin this PhD Studentship arose just before I graduated in the summer of 2011, and so I pretty much came straight back to University in the autumn. Outside of academia I love to read and am a qualified Freestyle Dance Instructor.</p>			
What you hope to get out of your PhD			
<p>I hope to broaden and further develop my laboratory-based technical skillset, as well as my experimental thinking. I'm also looking to seize as many opportunities as possible to travel and engage with people within academia and industry with a variety of different backgrounds in order to fully enrich my understanding of the research area.</p>			



A photograph of your work



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Signature: L. Dawson

Date: 10/09/13