Ref: VPARLD.1

Project Title: Characterization of novel correlates of protection following immunization with live attenuated African swine fever vaccines

Supervisors: Vlad Petrovan, Ana Reis & Linda Dixon  
Research group: African swine fever

Project Summary:
African swine fever (ASF) is a highly lethal viral disease of swine with a significant economic impact worldwide. Currently there is no treatment against ASF and due to the recent outbreaks in Asia, attention has been drawn to developing effective vaccines. The Pirbright institute is the leading research facility regarding vaccine development for ASF, due to the quality of research and equipment available in high containment facilities.

Our group has identified viral genes involved in virulence and persistence that were used to develop a series of live attenuated vaccines. The work done by the placement student will extend the current knowledge of vaccine development by understanding the basic mechanisms associated with protection. This will be carried out using different methods such as Western blot, immunofluorescence, immunoprecipitation, polymerase chain reaction, enzyme linked immunosorbent assay and cell culture work. The student will have the chance to help with other group projects regarding vaccine development.

At a personal level, the student will gain a new set of skills, regarding, but not limited to:

- working in high containment laboratories
- transferable mind-set for future positions in industry or academia
- becoming an independent researcher
- developing critical thinking
- writing and presenting progress reports

Details:
Depending on progress, the successful student may undertake the following in the duration of the research project:

- Opportunity to present the results at national or international conferences
- Help with other projects or animal trials

References for Suggested Reading:

1. Epidemiology of African swine fever virus - Virus Research Volume 173, Issue 1, April 2013, Pages 191-197

To Apply:
Please email your CV (no more than two sides of A4) and a covering letter detailing why you would like to undertake the placement and the knowledge and skills that you will bring to the Institute to lucy.drudge@pirbright.ac.uk

Closing date to apply: 01.02.21