



**Newcastle University**  
**School of Agriculture, Food & Rural Development**

**PhD position in Environmental / Animal Science**

An exciting 3 year PhD position is available from 1 September 2010 on the state of the art and topical subject of “**Reducing the environmental impact of growing and finishing pig systems by minimising their Phosphorus excretion**”. The studentship is sponsored by the British Pig Executive (BPEX) and will pay a maintenance grant of £13,000 and full fees for UK/EU based students.

*The overall aim of the studentship is to develop simulation models of food intake and nutrient digestion and utilisation for pigs, in order to be able to predict nutrient excretion (namely Nitrogen and Phosphorus) under different management scenarios for growing and finishing pig systems.* Phosphorus (P) excreted by pigs contributes to environmental pollution: P accumulates in the soil and contributes via leaching and run-off to eutrophication, both of the ground and of fresh water sources where it may cause excessive growth of algae. For this reason there is an urgent need to develop strategies to reduce the P excretion from pigs, which currently accounts for approximately 15% of the total diffuse P load from livestock to waters in England.

The successful candidate will have a good first degree (first or upper second class) in **Environmental or Animal Science, Agriculture or other relevant subject**. He/she should have or be willing to develop quantitative skills, especially in relation to simulation modelling, be enthusiastic and motivated by scientific problems that lead to applied solutions for the pig industry.

The student will be based at the School of Agriculture, Food & Rural Development at Newcastle University ([www.ncl.ac.uk/afrd](http://www.ncl.ac.uk/afrd)). The Integrative Animal Systems Group within the School is the UK leading centre for assessing the environmental impact of non-ruminant livestock and the past simulation models developed by members of the Group are now used widely in Europe and N America to predict the impact of husbandry changes in pig systems. The student will also work closely with the BPEX Knowledge Transfer team to gain an understanding of the context in which his/her project takes place, and disseminate relevant results to the pig industry.

Informal enquiries about the post can be made to Professor Ilias Kyriazakis [Email: [ilias.kyriazakis@newcastle.ac.uk](mailto:ilias.kyriazakis@newcastle.ac.uk)].

To apply, please send an application letter and CV by 18 June to:

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