UNIVERSITIES FEDERATION FOR ANIMAL WELFARE

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# Media Release

**From the**
## Universities Federation for Animal Welfare (UFAW)

**7th April, 2015**
**For Immediate Release:**

### Research aims to address genetic pre-disposition to lameness in pigs

A team led by researchers at Newcastle University in the UK has begun a project to identify biological and behavioural markers that can be used to detect genetic pre-disposition to degenerative joint disease that causes pain and lameness in pigs.

Lameness is a serious animal welfare and economic problem in commercial pig farming which has been found to affect up to 20% of pigs, an estimated 230,000 animals annually in the UK. It is also likely that animals with degenerative joint conditions will experience pain prior to the onset of clinically detectable lameness. Ability to predict the onset of clinical lameness will not only enable early intervention to alleviate pain, but may also allow selection of non-affected animals for breeding, so reducing the genetic pre-disposition to lameness.

The project, funded by the Universities Federation for Animal Welfare (UFAW), draws together a multi-disciplinary team in which researchers in human osteoarthritis from Arthritis Research UK's Centre for Osteoarthritis Pathogenesis (the Kennedy Institute at University of Oxford) and for Pain (University of Nottingham) will work alongside animal scientists from the SRUC (Scotland's Rural College) and Newcastle University.

The research aims to identify molecular markers in the blood and joint tissue of pigs affected by degenerative joint disease which could in future be used to identify animals likely to develop the condition before clinical signs appear. The relationships between the disease, specific biomarkers and subtle walking patterns recorded by detailed assessment of the animals' gait will be identified and validated. This may provide a reliable method of detecting current, and predicting future instances of, degenerative joint disease. Once validated, pain and lameness biomarker data have the potential to be included within breeding selection objectives – both in the genetic programme for population improvement and in the on-going screening of animals sold to production herds – and would bring significant benefits to pig welfare.

UFAW's Senior Scientific Programme Manager, Dr Huw Golledge said, "UFAW is delighted to be able to support this important project which has the potential to significantly improve the welfare and health of farmed pigs."

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Note to Editors:

The Universities Federation for Animal Welfare (UFAW) is an internationally recognised, independent scientific and educational animal welfare charity. It works to improve knowledge and understanding of animals' needs in order to achieve high standards of welfare for farm, companion, research, captive wild animals and those with which we interact in the wild.

UFAW improves animal welfare worldwide through its programme of awards, grants and scholarships; by educational initiatives, especially at university and college level; by providing information in books, videos, reports and in its scientific journal *Animal Welfare*; by providing expert advice to governments and others, including for legislation and 'best practice' guidelines and codes; and by working with animal keepers, scientists, vets, lawyers and all those who care about animals.

This work relies on the support of members, subscribers and donors.

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