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Humane Slaughter Association

Media Release

8 June 2016

HSA-FUNDED RESEARCH LEADS TO NOVEL HUMANE DEVICE FOR KILLING CHICKENS

PhD graduate designs neck dislocation glove

Dr Jessica Martin, the winner of the Humane Slaughter Association (HSA) Centenary Research Training Scholarship (RTS) in 2011, has graduated from the University of Glasgow with her PhD research which aimed to design a mechanical device to humanely kill chickens on-farm.

Each year, billions of poultry worldwide may need to be killed on-farm if birds are sick or injured or for small-scale slaughter. Since January 2013, in Europe, the use of manual cervical dislocation (MCD) as a killing method for poultry has been restricted by Council Regulation 1099/2009 on the protection of animals at the time of killing.

Dr Martin, who jointly studied at Scotland's Rural College (SRUC) in Ayr, designed and prototyped four mechanical devices (complying with the new EU Regulation 1099/2009), including a novel mechanical cervical dislocation glove, as a humane alternative to manual cervical dislocation for killing chickens. The devices were tested for their reliability and welfare impact using post-mortems, reflexes and behaviour, and brain activity analysis. The glove showed promise in optimising the cervical dislocation process and reducing the time to brain death, as well as reducing inconsistencies seen in manual applications. Dr Martin is currently investigating how to produce it commercially as a competitive replacement for MCD.

The study also highlighted the need for refinement of the glove training protocol, to allow for the wide variation in poultry keepers' MCD techniques and experience.

Since its foundation over 100 years ago, the HSA has led and/or contributed to major changes in attitudes towards animals, with scientific and technological developments resulting in huge improvements in methods for slaughter or killing.

-ENDS-

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Further information: Martin JE, McKeegan DEF, Sparrey J and Sandilands V. 2016. Comparison of novel mechanical cervical dislocation and a modified captive bolt for on-farm killing of poultry on behavioural reflex responses and anatomical pathology. *Animal Welfare* **25**: 227 – 241. DOI: 10.7120/09627286.25.2.227.

Note to Editors:

The HSA is an independent charity recognised internationally for promoting scientific, technical and educational advances towards improving the welfare of food animals worldwide at slaughter, killing, marketing and transport.

Its work includes researching, refining and demonstrating humane slaughter methods, publishing material such as guidelines, best practice, books and videos, funding research projects and the development of equipment. Specialist technical staff provide expert and practical advice on all welfare issues relating to food animals.

The HSA is funded by voluntary donations, subscriptions and legacies.

For more information about the HSA's work call 01582 831919, email info@hsa.org.uk or visit www.hsa.org.uk

Humane Slaughter Association

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