

Media Release

From the Universities Federation for Animal Welfare (UFAW)

1st July, 2015

For Immediate Release:

Research shows high risk of eye disease in dogs bred for exaggerated facial features

Researchers at the Royal Veterinary College (RVC) have recently concluded a 14-month study of the incidence of corneal ulcers in dogs which shows that dogs with wider eyes, shorter muzzles and a wrinkle over their noses are at the highest risk of developing the condition.

A corneal ulcer is an injury of the transparent part of the eye, and may cause redness, watering, squinting and rubbing of the eye. This painful condition can lead to scarring and perforation of the cornea, potentially causing blindness. The RVC study, reported in a paper by Rowena Packer, Anke Hendricks and Charlotte Burn published in the journal PLoS ONE*, involved dogs entering a large UK based small animal referral hospital for both corneal ulcers and unrelated disorders. Diagnoses of corneal ulcer following clinical examination were correlated with four features common to breeds selected for exaggerated facial conformation: brachycephalic (short-muzzled) skull shape; nasal skin fold (wrinkle); large eyelid aperture; and exposed eye-white.

Exaggerated, juvenile-like facial conformations have long been suspected by vets as risk factors for corneal ulcers and this study showed for the first time that brachycephalic dogs were twenty times more likely to be affected than non-brachycephalic; dogs with nasal skin folds were nearly five times more likely. Wide eye apertures and exposed eye-white also significantly increased risk of ulcers. Most cases were small breed dogs with the most commonly diagnosed breed being the Pug. French Bulldog, Bulldog, Shih Tzu and Pekingese were among other breeds with relatively high percentages of ulcer cases. The researchers concluded that artificially selecting for exaggerated facial characteristics in breeding greatly heightens the risk of corneal ulcers and in order to improve dog welfare should therefore be discouraged.

“It can be hard to resist the popular appeal of large eyes and iconic facial features when choosing a dog,” said Dr Burn, “but these findings highlight the importance of looking past a dog’s appearance to choose a companion likely to be free of unnecessary pain – and even blindness – throughout its life.”

Dr Packer added “If choosing to buy a dog from an at-risk breed like the Pug or French Bulldog, selecting puppies with mothers and fathers that have less exaggerated features – smaller eyes without white showing, longer muzzles, and faces with less wrinkling may go some way to reducing the risk of your dog developing this painful condition in the future.”

The research was supported by the Universities Federation for Animal Welfare (UFAW), an independent charity which promotes advances in animal welfare through scientific and educational activities. UFAW has an extensive web-based information resource on genetic welfare problems in dogs, cats and other companion animals which can be viewed at www.ufaw.org.uk/geneticwelfareproblems.php.

*<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0123827>

SCIENCE IN THE SERVICE OF ANIMAL WELFARE

Chief Executive and Scientific Director: Robert C Hubrecht OBE BSc PhD FSB

Secretary: Jane Moorman

Registered in England Charity No. 207996 and Company Limited by Guarantee No. 579991



UNIVERSITIES FEDERATION FOR ANIMAL WELFARE

The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire AL4 8AN, UK.

Tel: +44(0)1582 831818 Fax: +44(0)1582 831414

Website: <http://www.ufaw.org.uk>

Email: ufaw@ufaw.org.uk

-ENDS-

Attached photo:



Suggested caption: *Pug, with a history of corneal ulcers, showing all four of the facial features investigated in the research: brachycephalic skull shape (short muzzle), wide eye aperture, nose wrinkle and eye-white visible.*

Media contact:

Robert Hubrecht, Chief Executive and Scientific Director, UFAW. Tel: 01582-831818,
email hubrech@ufaw.org.uk

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.

Website: www.ufaw.org.uk

 Universities Federation for Animal Welfare - UFAW

 Twitter: @UFAW_1926

SCIENCE IN THE SERVICE OF ANIMAL WELFARE

Chief Executive and Scientific Director: Robert C Hubrecht OBE BSc PhD FSB

Secretary: Jane Moorman

Registered in England Charity No. 207996 and Company Limited by Guarantee No. 579991