



UNIVERSITIES FEDERATION FOR ANIMAL WELFARE

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Media Release

From the

Universities Federation for Animal Welfare (UFAW)

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For Immediate Release:

Mice need warm beds: better welfare means better science, research concludes

The results of research funded by the Universities Federation for Animal Welfare (UFAW), recently published in the journal PLOS One, could not only mean better welfare for many millions of mice used in laboratories around the world but also better science based on their use.

With funding from UFAW's William Russell Memorial Fellowship, Dr Joe Garner (now associate professor of comparative medicine at Stanford University, formerly at Purdue University) led a team of researchers investigating the reduction of cold stress in laboratory mice through an examination of their temperature and nest building preferences. The PLOS One paper, lead author Brianna Gaskill, can be accessed at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0032799>.

Codes of practice and regulations used around the world specify temperature ranges in which to keep laboratory mice – by far the most used animal in research – but these temperatures result in thermal stress that may affect their welfare and the results of the research in which they are used. “If you want to design a drug that will help a patient in the hospital, you cannot reasonably do that in animals that are cold stressed and are compensating with an elevated metabolic rate,” Dr Garner said. “This will change all aspects of their physiology – such as how fast the liver breaks down a drug – which can't help but increase the chance that a drug will behave differently in mice and in humans.”

Rather than raising the temperatures in which the mice are kept (often not a feasible option), the study showed the importance of providing the mice with appropriate amounts and types of nesting materials with which the mice will themselves regulate their body temperatures to a comfortable level.

While many laboratories do provide mice with nesting materials, in many parts of the world this is not routine. By linking better science with better welfare, the work of Dr Garner and his team provides a major incentive to laboratory researchers to improve the conditions in which mice are housed. Better results of research could also lead to reduced numbers of animals being used.

UFAW's William Russell Memorial Fellowship commemorates the work of Professor Russell and his colleague Rex Birch who, while working at UFAW, developed the principles of the 3Rs – Refinement, Reduction and Replacement – now adopted throughout the world as the guiding principles of humane use of animals in scientific research. Dr Garner was the first recipient of the Fellowship.

-ENDS-

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SCIENCE IN THE SERVICE OF ANIMAL WELFARE

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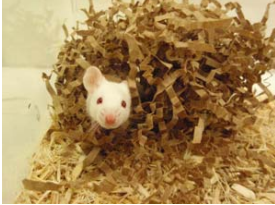
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Photo attached:



Dr Garner and his colleagues found that giving lab mice nesting materials helps them naturally regulate their body temperatures at comfortable levels. Photo Credit: Brianna Gaskill.

Note to Editors:

The study published by Dr Garner and his team can be accessed at:

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0032799>

UFAW

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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