



MEDIA RELEASE

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MICE FORCED TO INHALE CIGARETTE SMOKE IN OUTDATED RESEARCH

In tests, that many people do not realise are still being carried out in Australia, laboratory mice by the dozens are being loaded into tubes and forced to inhale cigarette smoke at the University of Newcastle, NSW.

Humane Research Australia has uncovered research at the university which attempts to use mice as experimental models of cigarette smoke-induced Chronic Obstructive Pulmonary Disease (COPD). (COPD is a group of progressive lung diseases that block airflow and make it difficult to breathe. Diseases include emphysema, chronic bronchitis and asthma).

The experiments

Dozens of mice in various experiments are loaded into individual tubes (picture attached) and lined up on laboratory benches. In one experiment,² once healthy mice are forced to inhale cigarette smoke for up to 45 minutes, twice a day for 5 days a week, for up to 12 weeks. Yet this unscientific research does not adequately replicate the human condition of COPD which develops over many years.

Humane Research Australia's spokesperson, Robyn Kirby has questioned how any animal ethics committee would even consider approving these ethically unacceptable procedures.

"The public is constantly being told that animal experiments are closely monitored by animal ethics committees to ensure that unacceptable procedures are not carried out. These experiments approved by the University of Newcastle Animal Ethics Committee fly in the face of this misconception.

"Not only has the ethics committee approved of these experiments but has allowed them to continue at the University since at least 2008" Ms Kirby said today.

Wasted taxpayers' dollars

Also of concern is the huge waste of taxpayer's dollars on this research.

"During the period from 2008 to 2012 these researchers at the University of Newcastle have received over 2 million dollars of taxpayers' dollars from the National Health and Medical Research Council (Australia's premier medical funding body) to develop a mouse model of cigarette smoke-induced disease¹

"The 2 million dollars of taxpayer's money for developing a mouse model could have been better spent on replacement/alternative research or furthering campaigns to end smoking in the community. Instead millions have been spent on attempting to produce a mouse model of a cigarette smoker!

Animal welfare concerns

Understandably HRA is also concerned about the welfare of these animals. Forced into small smoking tubes, they suffer complications from the diseases forced upon them as well as stress in the cramped unnatural conditions. "Often not adequately monitored, animals in these devices suffer unobserved unnatural behavior, stress and unexplained deaths" Ms Kirby said.

Unreliable research

Animal models do not mimic the entire COPD. Different animals have different reactions to toxins and animals in laboratories are not exposed to cigarette smoke in the same manner or time frame as human smokers are. In fact different species of the mouse react differently to the exposure.

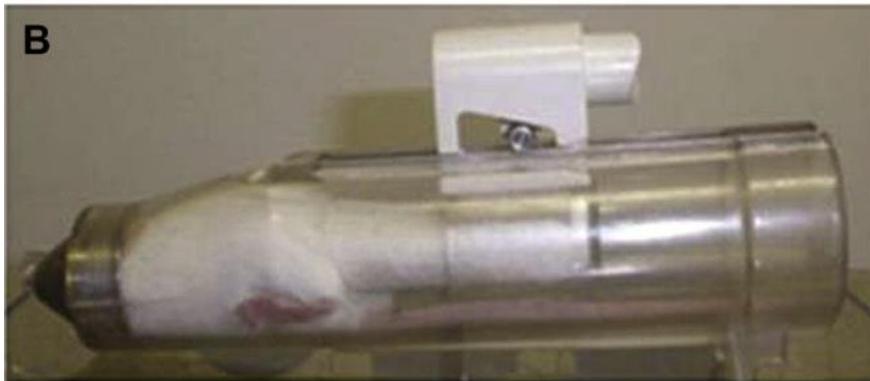
In past international publications, scientists³ have stated that neither small airway disease nor COPD exacerbations caused by cigarette smoke can be effectively modelled in animals.

Given the prevalence of pulmonary disease and influenza infection among human individuals, one must seriously question why the researchers engaged in this study did not utilise a human sample to conduct this study, and/or advanced human biology-based methods of research, in order for results to be directly relevant to human health outcomes" Ms Kirby concluded today.

End.

References

1. Hansbro research team NHMRC funding summary available on request
2. Hsu, A C-Y., Starkey, M.R., Hanish, I., Parsons, K., Haw, T.J., Howland, LJ, Barr, I., Mahony, J.B., Foster, P.S., Knight, D.A., Wark, P.A, Hansbro, P.M. *Targeting PI3K-p110 α Suppresses Influenza Virus Infection in Chronic Obstructive Pulmonary Disease* American Journal of Respiratory and Critical Care Medicine V191, No. 9 (2015)
3. Wright, JL., Chung, A. *Animal models of cigarette smoke-induced chronic obstructive pulmonary disease* Expert Rev Respir Med 2010 Dec 4(6) 723-34



Custom-designed and purpose-built directed flow inhalation and smoke-exposure system., A mouse in one of the smoking chambers. Photo for educational purposes.

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