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IN FOCUS

The Tangled Ethics of Animal Testing in Universities

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very year or two, the issue of animal testing in universities is dragged into the headlines. In Trinity between 2012 and 2016, over 100,000 animals were purchased for the purposes of experimentation, prompting predictable backlash.

There's really no end to the imperfect ways that our society treats animals: factory farming, bloodsports, fur wearing, even caging up hamsters for children's amusement. But in films and books, where white coat-clad men deliver electric shocks or injections to squirming rats and whimpering beagles, animal experimentation comes across as a particularly odious form of animal abuse, one that is almost torturous in nature. Of course, we should take media portrayals of animal testing with a pinch of salt. In Ireland today, the practice is tightly regulated, and how it is conducted has changed in tow with a drive to make our treatment of animals more "humane".

At base, animal research still involves harming animals at humans' expense. But conversation around the issue has opened up, and most scientists now actively seek to minimise the suffering of their non-human subjects. Mark Cunningham, a professor of physiology, explains to me that he adheres to the philosophy of the "three Rs": replacement, reduction, and refinement. "I like to approach the work that I do always with these concepts at the back of my mind", says Cunningham, Within this framework, it's crucial to plan carefully and have in mind a very specific hypothesis before using animals: "You should always think about how you design an experiment, you should think about the statistics you're going to use.'

There are also incentives to avoid animal research altogether. "None of us will work with animals unless we have to", says Tomas Ryan, an associate professor of biochemistry. He explains that, as well as being ethically dubious, animal research is expensive, slow and laborious. "If a scientist can get data, even of a nearby quality to what they can get with animals, using cell systems, or using in-vitro systems, or using some non-living orgasm way, we would love to do that." Ryan tells me that scientists also try to keep their subjects happy for the sake of not only the law, but good science. Animals' cages contain "enrichments", and their health is closely monitored: "If animals

are happy and comfortable, then you need less animals to get a statistically significant result."

"It's no exaggeration to say that all animals in Ireland, and I think in Europe in general, get better healthcare than the most advanced healthcare systems for humans in Europe", says Ryan. "So they generally get treated extremely well, certainly to a much higher standard than agriculture animals."

"Anything that will result in severe damage to animals or death is not allowed", he says. It happens, of course – but you can't carry out experiments where it's an expected result. "If you have an indication that the animal is going to die, you have to euthanise it painlessly", says Ryan.

While some might see these developments as genuine advances in animal welfare, others might be cynical that these utilitarian approaches are actually any better a deal for the animals involved. In the grand scheme of things, their interests still rank last. As well as this, many high-profile journals still expect research to have been tested on animal models, giving scientists who work with animals a certain competitive edge. In this sense, animal testing continues to be normalised among researchers.

"I suppose there is a bit of a detachment", says Cunningham, who explains that working with rats – who are naturally gentle and inquisitive – is a pleasure. "I have to say, 'I'm sorry, but I'm going to have humanely kill you and take your brain out'. And that's the reality of what we do." It's not something that Cunningham does lightly: like many scientists, for him, it's part of the bigger picture, of finding cures for serious diseases. Sometimes it has been challenging on a personal level, too: Cunningham describes having to work with newborn rats, who closely resemble human fetuses. "I actually found it quite distressing", he says. "I didn't really enjoy doing it."

"If I can find alternative ways to test the hypotheses, then that's great", he continues. "If not, then, you know, I have to use animals. And I use them again in a way that is ethical, it's legislated, and we do our experiments in a humane manner." Not all advocates for animal rights look favorably upon ideas of "humane" treatment or harm "reduction", however. One of the world's most famed animal rights theorists, Gary L Francione, believes that such "softly, softly" approaches – which, in his eyes, merely regulate mistreatment of animals - do more harm than good: "The primary benefit of 'humane' reforms is that they make humans feel better about exploiting animals", he has argued.



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For Francione, harming animals – like harming humans – is straightforwardly wrong. The benefits of animal research may be enormous, his argument goes, but there are surely acts of cruelty so abhorrent that no "greater good" can ever justify them. Indeed, Dan Ly-

ons of Anti-Vivisection Society Ireland, which has been outspoken about animal testing in Ireland in the past, explains that the group believes "any harmful experimentation on animals is morally wrong, for the same reason that harmful experiments on human animals

would be wrong". However, Lyons accepts that revolutionary change isn't going to happen overnight, and he believes that what we need are concrete plans to reduce – and eventually eliminate - animal experimentation, and not just at the university level. "It's a difficult situation for individual scientists", he says. "The wider problem is there's been a lack of investment, the lack of national or international strategies." While universities and their researchers often show willingness to progress in this area, their power to effect change is limited. "With the best will in the world, there isn't always that much there because the whole kind of area of research has been neglected." "Developing animal alternatives is not seen



Researchers themselves are often deeply tuned into concerns, but they inevitably get used to animal experimentation as the kind of sexiest aspect of biomedical research. There are easier ways of getting funding and getting papers published", says Lyons.

Still, there are tangible steps universities can take: setting targets to reduce the quantity and severity of animal experiments, for example,

as well as investing in the development of non-animal research techniques. Of course, these changes need to be underpinned by a wider societal shift – which, Lyons points out, can happen fairly quickly, as we're witnessing right now with the surge in veganism. It's hard to get away from the moral dilemma at the heart of animal research: no amount of regulation or flash ethics policies can truly bury it. Researchers themselves are often deeply tuned into concerns, but they inevitably get used to animal experimentation being a part of their work – especially when there's so little they can do to effect change on an individual level.

And the result in universities is, ultimately, complacency. "There's a big cultural shift that needs to take place", Lyons says, "from one that kind of ticks boxes and pays lip service to animal welfare, to one that actually puts it at the heart of the organisation".