 We use cookies for site personalization and analytics. You can [opt out](#) of third party cookies. More info in our [privacy policy \(/about/privacy\)](#).

Got it

[Magazine \(/magazines\)](#) [Ethical Shop \(https://shop.newint.org?utm_medium=ni-www-nav&utm_source=menu-link\)](#) [Books \(/topic\)](#) [Support us \(/misc/support-us\)](#) [About \(/about\)](#) [Contact \(/contact\)](#) [Subscribe \(/rdr.php?utm_medium=ni-www&utm_source=highlighted-top-menu-item\)](#)

New Internationalist


THE COSTS AND BENEFITS OF ANIMAL EXPERIMENTS


Andrew Knight
(/author/Andrew+Knight)

More about
[Andrew Knight \(/author/Andrew+Knight\)](#)

SHARE ARTICLE:

 (<https://www.facebook.com/sharer/sharer.php?u=https://newint.org/blog/2011/07/07/animal-testing-costs-benefits>)

 (<https://twitter.com/intent/tweet?url=https://newint.org/blog/2011/07/07/animal-testing-costs-benefits&via=newint&related=newint&text=The+costs+and+benefits+of+animal+experiments>)

 (<mailto:?subject=newint.org%3A%20The%20costs%20and%20benefits%20of%20animal%20experiments%0A%0A%2A%2AThe%20costs%20and%20benefits%20of%20animal%20experiments%2A%20owned%20journalism%3A%20https%3A%2F%2Fnewint.org%2Fmisc%2Fsupport-us%2F%0A>)

7 July 2011

[Animals \(/topic/Animals\)](#)

[Medicine \(/topic/Medicine\)](#)

That the human body is a machine, albeit an incredibly complex one, is the striking claim made by Laurie Pycroft, the [advocate of animal experimentation](#) (<https://www.newint.org/sections/argument/2011/06/01/animal-testing-medical-research-laurie-pycroft-pro-test/>) in the Argument in the current issue of *New Internationalist*.

Of course neither animals nor people are simply machines. Thinking that they are reveals a fundamental failure to appreciate their other qualities, such as their capacity for emotion, or ability to engage in genuine social relationships.

More disturbingly, such a claim reveals a degree of moral blindness. Machines have no moral standing. Living creatures do. In particular, unlike machines, both laboratory animals and people have the ability to suffer when afflicted by diseases, or when subjected to laboratory environments or procedures.

A utilitarian moral case based on 'the greatest good for the greatest number' might still be made for experimenting on animals, if it were truly the case that such research yielded tangible advancements in human healthcare. A parallel case could be made for experimenting on people to help a greater number of others. However, most people consider such practices morally abhorrent. Yet animal researchers and their advocates use a similar argument to justify invasive experiments on animals.

In order for this argument to hold, the moral standing of animals must be significantly less than that of people. When animals are seriously harmed or killed for relatively trivial human benefit, such as cosmetics testing or the satisfaction of scientific curiosity, the moral standing of animals must be thought extremely small. In 2011 Judith Benz-Schwarzburg and I reviewed in detail the scientific evidence for the existence of cognitive and related abilities in animals¹. There is ample scientific evidence from this study and others demonstrating that many animals – including virtually all laboratory animals - have sufficient psychological characteristics to justify their inclusion within the community of moral consideration. This implies that many of the ways we use such animals, including subjecting them to involuntary confinement and

participation in potentially harmful biomedical research, are wrong.

Additionally, the usefulness of invasive animal experiments is controversial. Some scientists claim these are essential for combating major human diseases or detecting human toxins. Others claim the contrary, pointing to the thousands of patients harmed by pharmaceuticals developed using animal tests. Similarly, some claim that all experiments are conducted humanely, to high scientific standards. Yet, a wealth of studies have recently revealed that laboratory animals suffer significant stress, which may also distort experimental results. Where, then, does the truth lie? How useful are such experiments in advancing human healthcare? How much do animals suffer as a result?

In *The Costs and Benefits of Animal Experiments*

(<https://www.palgrave.com/products/title.aspx?PID=393522>)

I provide more than a decade's worth of scientific research, personal experience, and an analysis of over 500 scientific publications, to give evidence-based answers to the key question: are animal experiments ethically justifiable? Systematic reviews examine large numbers of animal experiments selected randomly to eliminate bias. They represent the 'gold standard' when assessing biomedical research. In only two of 20 reviews located did the authors conclude that animal models were either significantly useful in contributing to the development of human clinical interventions, or substantially consistent with clinical outcomes. Furthermore, one of these conclusions was contentious. Seven additional reviews also failed to demonstrate reliable predictivity of human toxicities

such as carcinogenicity and teratogenicity, and no reviews demonstrated contrary results. Results in animal models were frequently equivocal or inconsistent with human outcomes.

When considering overall costs and benefits one cannot reasonably conclude that the benefits which accrue to human patients or to those motivated by scientific curiosity exceed the costs incurred by animals subjected to scientific procedures. On the contrary, the evidence indicates that actual human benefit is rarely – if ever – sufficient to justify such costs.

According due respect to animal interests does not require the termination of all animal research, however. Such research ranges from field studies of wild populations, through non-invasive behavioural or psychological studies of sanctuary or laboratory populations, to mildly harmful invasive experimentation, more harmful experimentation, and, finally, protocols resulting in major harm or death. Ethical concerns are minimised in non-invasive observational, behavioural, or psychological studies of free-living or sanctuary populations.

Limiting animal research in this way would inevitably restrict the range of scientific questions that could be investigated. It would, however, strike the correct ethical balance between satisfying the interests of animals, and satisfying those of human beings, none of whom may be considered merely ‘machines’.

[1] Benz-Schwarzburg J & Knight A. 'Cognitive relatives yet moral strangers?', *J Anim Ethics* 2011; 1(1): 9-36.



Patreon is a platform that enables us to offer more to our readership. With a new podcast, eBooks, tote bags and magazine subscriptions on offer, as well as early access to video and articles, we're very excited about our Patreon! If you're not on board yet then check it out here.

Support us » (https://www.patreon.com/newint?utm_medium=ni-www&utm_source=article_end_patreon_button)

RELATED ARTICLES



[\(/features/2018/04/01/the-drugs-dont-work\)](/features/2018/04/01/the-drugs-dont-work)

THE DRUGS DON'T WORK

[\(/features/2018/04/01/the-drugs-dont-work\)](/features/2018/04/01/the-drugs-dont-work)

Lea Surugue reports on the dramatic rise of heart disease in Africa and the corresponding crisis of fake cardiac drugs.

[\(/features/2018/04/01/the-drugs-dont-work\)](/features/2018/04/01/the-drugs-dont-work)

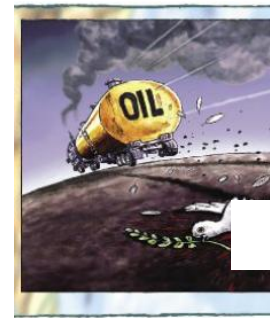


[\(/features/web-exclusive/2016/12/20/mosquitoes-versus-humankind\)](/features/web-exclusive/2016/12/20/mosquitoes-versus-humankind)

MOSQUITOES VERSUS HUMANKIND (</features/web-exclusive/2016/12/20/mosquitoes-versus-humankind>)

[EXCLUSIVE/2016/12/20/MOSQUITOES-VERSUS-HUMANKIND](/features/web-exclusive/2016/12/20/mosquitoes-versus-humankind)

The fight against vector-borne diseases is in dire need of new insecticides. But it's unlikely that real alternatives will make... [\(/features/web-exclusive/2016/12/20/mosquitoes-versus-humankind\)](/features/web-exclusive/2016/12/20/mosquitoes-versus-humankind)



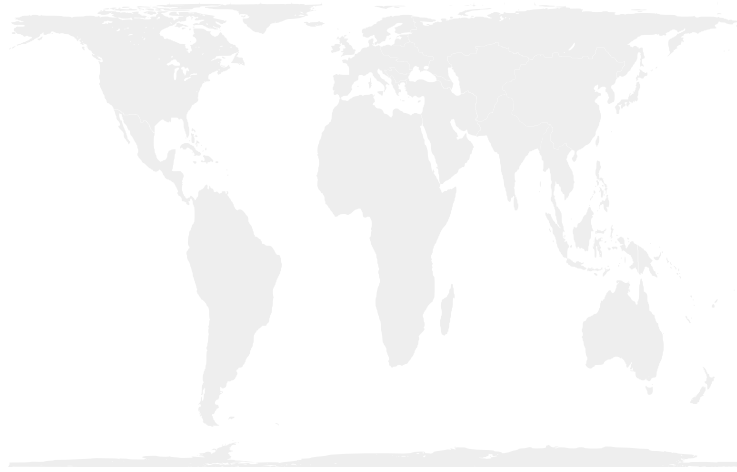
[\(/features/2016/10/01/big-bad-world\)](/features/2016/10/01/big-bad-world)

BIG BAD WORLD (</features/2016/10/01/big-bad-world>)

The latest Polyp cartoon, from October's New Internationalist magazine.

[\(/features/2016/10/01/big-bad-world\)](/features/2016/10/01/big-bad-world)

EXPLORE YOUR PASSIONS BY TOPIC AND REGION



[Climate \(/topic/Climate\)](/topic/Climate) [Democracy \(/topic/Democracy\)](/topic/Democracy)

[Economics \(/topic/Economics\)](/topic/Economics) [Technology \(/topic/Technology\)](/topic/Technology)

[Human Rights \(/topic/Human Rights\)](/topic/Human Rights) [Migration \(/topic/Migration\)](/topic/Migration)

[Minorities \(/topic/Minorities\)](/topic/Minorities) [War & Peace \(/topic/War & Peace\)](/topic/War & Peace)

[Magazine \(/magazines\)](/magazines)

[Ethical Shop](#)

[\(https://shop.newint.org?](https://shop.newint.org?utm_medium=ni-www-nav&utm_source=footer-link)

[utm_medium=ni-www-](#)

[nav&utm_source=footer-link\)](#)

[Books \(/books/\)](/books/)

[Browse \(/topic\)](/topic)

[Subscribe \(/rdr.php?](/rdr.php?utm_medium=ni-www&utm_source=footer-link)

[utm_medium=ni-](#)

[www&utm_source=footer-](#)

[link\)](#)

[Support us](/misc/support-us)

[\(/misc/support-us\)](#)

[About \(/about\)](/about)

[Jobs \(/about/jobs/\)](/about/jobs/)

[Privacy \(/about/privacy/\)](/about/privacy/)

[Policies \(/about/policies/\)](/about/policies/)

[Complaints](/about/complaints/)

[\(/about/complaints/\)](#)

[Contact \(/contact\)](/contact)

Never miss another story again! Get our
free fortnightly enews.

[Sign-up](#)



[. \(https://twitter.com/newint\)](https://twitter.com/newint)



[\(https://www.facebook.com/newint\)](https://www.facebook.com/newint)



[\(https://www.instagram.com/newinternationalist\)](https://www.instagram.com/newinternationalist)



[\(/plain-rss.xml\)](#)