



RESOURCE SHEET NUMBER 11– FUNDING AND THE NATIONAL CENTRE OF THE 3RS (NC3RS)

It is very difficult to accurately identify how much the UK spends on human relevant NAMs research. Calculations suggest it is close to insignificant at less than 1% of that allocated to animal use. For example:

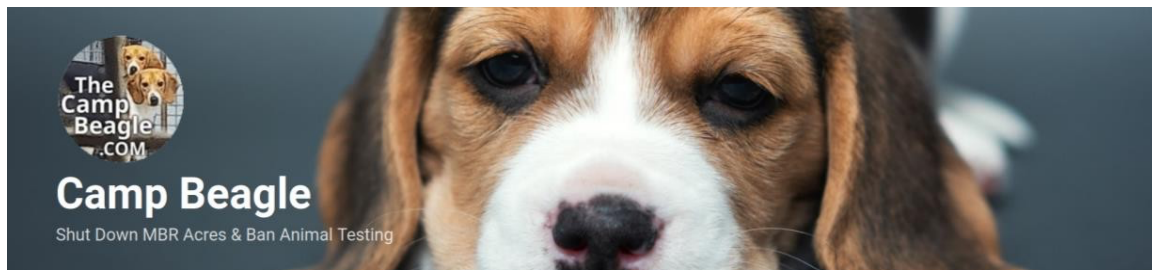
1. In 2019, the UK government's gross expenditure on research and development (R&D) was £ 38.5 billion. Around 40%, £ 15.4 billion, is spent on basic research which uses many animals and is largely publicly funded. The annual budget of the NC3Rs is around £10 million, of which around £ 6.375 million is for “replacement” although this is not all NAMs as includes replacing one species with another. This equates to just 0.016%.
2. NAMs funding represents between 0.2% and 0.6% of total biomedical research funding in the UK and ~0.02% of the total public expenditure (£10.45B for 2019-2020) on R&D.

Funding must be on a scale that reflects the urgency and importance of this issue. In the existing animal research paradigm, novel drugs take 10 -15 years to reach the market at a cost of over £1.5 billion.

There is an urgent need for greater funding to improve the human relevance of research and greater human safety by accelerating the uptake of NAMs. The Government consistently points to the NC3Rs as the main source of funding for NAMs. However, the NC3Rs annual budget is only around £10 million and evidence provided to the All-Party Parliamentary Group (APPG) on Human Relevant Science in May 2021 indicated that around 16% of grants have focused on the ‘refinement’ of animal research, with around 20% focusing on reduction, neither of which address translational problems. Core funding for the NC3Rs is provided by the MRC and BBSRC. Since their combined budget allocation for 2021/22 was over £1 billion, a negligible proportion of this is being allocated to the NC3Rs. Appropriate funding will be essential for enabling the UK to realise its scientific and economic potential in the field of human relevant research.

ASPAs 1986, Section 20B, has enshrined the concept of the development of alternative strategies as a legal requirement. The Secretary of State (SOS) must support the development and validation of alternative strategies. Alternatives must be developed and promoted at a Governmental level, not just at a scientific level. Although the SOS has statutory duties to support the development of non animal testing this is often overlooked.

We refer you to [Human relevant science APPG report March 2022](#) for more information on funding and the lack of uptake of NAMs.



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The NC3Rs commissioned, Dr Frances Rawle, former Director of Policy, Ethics and Governance at the Medical Research Council (MRC), to produce a detailed review of the current 3Rs landscape. [Rawle Report](#)

This is highly critical of the lack of funding and availability of information of “replacements.”

Extracts from conclusions are:

Replacement is the area least well covered by existing review processes; the possibility for replacement is best considered at an early stage of the research planning process as AWERBs find it difficult to challenge once funding is in place. AWERBs and ASRU rarely have the detailed scientific expertise to determine whether replacements are available and suitable, so the best strategy for improving this situation would be to ensure that the expert peer review organised by the funders explicitly covers this area.

Improving the availability of information on replacements and how they compare to established animal methods, the ability of NIOs to help researchers fulfil their responsibilities to search for replacements, and the access to expert help and funding to try out new methodologies should help speed uptake of replacement methods.

Extracts from recommendations are:

“...so the best strategy for improving this situation would be to ensure that the expert peer review organised by the funders explicitly covers this area.”

This is the subject of our first petition where we suggested an advisory NAMs specialist committee, even an independent report reached the same conclusion.

In the Westminster Hall debate on 19 February 2024 please see:

[hansard 2024-02-19 debate](#) the Science Minister said

“I can announce that, from £10 million this year, that investment will reach £20 million per annum across the system in fiscal year 2024-25, which is a doubling of what is given to research in this space.”



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The NC3Rs when asked to comment told us:

It is important to note that the announcement was about additional funding across “the system” and not specifically for the NC3Rs. That said we have recently received an additional £5M to spend in this financial year on non-animal methods. Of this, we are spending £4M on grants for infrastructure to accelerate the use of approaches that replace the use of animals in research and testing – please see [NC3Rs funding non animal methods infrastructure grants](#) for further information. We are also spending £1M on projects to characterise and validate the use of non-animal derived reagents and products for use in in-vitro research. – please see [NC3Rs non animal derived product validation grants](#) for further information.

The recently published: Replacing animals in science - A strategy to support the development, validation and uptake of alternative methods [Link](#) has new funding over 5 years of:

£75M in funding, £60M will set up a new hub collating data, technology and expertise to encourage collaboration between researchers, and a separate new UK Centre for the Validation of Alternative Methods (UKCVAM) to streamline the path to regulatory approval for new alternatives. In addition, an extra £15.9M has been put forward by the Medical Research Council (MRC), Innovate UK and the Wellcome Trust to advance new *in vitro* models of the liver, brain, cancer, pain and blood vessels for use as more human-relevant alternatives.

At the moment there is little information about the £60 million hub but it looks to be just administrative and not involved in the development of non-animal methodologies (NAMs). The £15.9 million investment into NAMs is paltry compared to the amounts granted annually to animal research. To our mind a starting annual reallocation of funding should be £250 million to be granted to the development of NAMs. Of course like everyone we would like animal research for cross species testing to be stopped right now as quite simply it doesn't work. Significant investment into NAMs now will ultimately protect the NHS for future generations.