

Statement on Research Involving Animals

There are many reasons why animals are used in research. They help further our understanding of biology, provide models to study disease which leads on to the development of potential cures and treatments, and also help us in the protection of humans, animals and the natural environment. As scientific advancements continue we are more frequently able to use alternatives to animals for parts of our research using methods such as cell or tissue culture and computer modelling, however no alternative method has yet been developed which allows animals to be fully substituted for the complex biological characteristics of man and animals. For example to study high blood pressure hearts and blood vessels are required, and while some aspects of arthritis can be studied using alternative methods a full understanding requires bones and joints. The University of Hull uses many different strategies, models, methods, and technologies for biomedical research however in some cases, when all attempts to find alternative methods have been exhausted animal models are sometimes used to support and expand our knowledge in crucial areas of research.

If and when animals are to be used in research the University of Hull is committed to developing and proactively maintaining a thorough and objective process of ethical review that requires researchers to justify any animal use and maximise animal welfare.

The welfare of animals is managed by the Animal Welfare Ethical Review Body which has a wide and open membership, but as a minimum consists of experienced Named Animal Care and Welfare Officers (NACWOs), Named Veterinary Surgeon (NVS), members of the scientific community who review the research programme, and lay members who are not university employees whose job it is to represent the views of the general public. The job of all of these AWERB members is to challenge, review and refine all work which involves animals. Once approved by AWERB and the Animals in Science Regulation Unit of the UK Home Office the University expects that such work is conducted to the highest standards, meeting or exceeding the legal requirements and available guidance. All involved must undertake appropriate education, training, supervision and competency assessment before undertaking procedures with animals, all of which is overseen by the university NTCO (Named Training and Competency Officer) using a rigorous system which continues to reassess individuals on a recurrently throughout the entirety of the research programme. The importance of our moral and legal obligations underpins our culture of care and compliance.

At the University of Hull we apply the same standards regardless of whether our researchers are working with animals in an aquarium, a laboratory, or involved with conservation work in the field.

The University recognises that high standards of animal welfare contribute to good scientific outcomes and this policy helps ensure that new knowledge acquired will ultimately benefit mankind, other animals and the natural world in which man and animals all share in and reside.

Research Regulation

Animal research is strictly regulated by the UK Home Office under the Animals (Scientific Procedures) Act 1986. The University is subject to audit inspections by the Home Office who examine all aspects of animal research, care and welfare. For regulated work to be carried out the premises must be granted an Establishment Licence which controls the areas work may take place and ensures those areas meet all the standards laid out in the Code of Practice for the Care and Accommodation of laboratory animals. The Principle Investigator will also require a Project Licence which covers the purpose, project plan and justification of the work. Such licences are only issued if

the potential benefits of the work are likely to outweigh the effects on the animals concerned. Finally, any individual who may carry out regulated procedures on protected animals must hold a valid Personal Licence which will be granted subject to training on UK legislation, ethics, animal welfare and the 3Rs.

The University expects all those involved in scientific research involving animals to take personal responsibility for knowing their statutory responsibility under the Animal (Scientific Procedures) Act 1986. They must also receive appropriate and on-going training.

The Animal Welfare Ethics Review Body (AWERB) offers on-going support and guidance to researchers on best practice for animal involvement, welfare and refinement. They provide a forum for discussion and responsible for establishing a robust culture of care. All work involving animals conducted by the University of Hull is considered by our AWERB even if this work is below the threshold requiring regulation under the Animals (Scientific Procedures) Act 1986 (ASPA).

Principles for Animal Research

The University is fully committed to applying the principles of the NC3Rs initiative, which is used to improve the design and reporting of animal studies. The principles of the 3Rs should be applied - these are:

Reduction - methods which minimise the number of animals involved.

Refinement - methods which minimise any harm and discomfort and can improve welfare.

Replacement - the use of methods to help avoid or replace animal involvement.

Research only occurs with animals when necessary and when there is no alternative. We are continually seeking alternative methods and techniques that will enable researchers to further their research without involving animals, for example by developing in-vitro techniques (e.g. tissue culture) and computer modelling. However, the complexity of both humans and animals cannot always be fully replicated by alternative systems, and therefore the involvement of animals cannot completely be eliminated. Where alternatives cannot be found, only the smallest possible number of animals are involved, and our scientists and care staff work hard to ensure that these animals have the highest standards of care and that the principles of the 3Rs are applied.

ARRIVE Guidelines

The University of Hull fully supports and endorses the ARRIVE (Animal Research: Reporting of In Vivo Experiments) guidelines. These guidelines are intended to improve the design, analysis and standards of reporting research using animals by maximising the information published and minimising unnecessary studies. The ARRIVE guidelines are actively promoted by the AWERB for use by licence applicants; during training courses and within research group seminars.

Concordat on Openness

The Concordat on Openness is a set of commitments for UK-based life science organisations to enhance their animal research communications.

Commitment 1: We will be clear about when, how and why we use animals in research

Commitment 2: We will enhance our communications with the media and the public about our research using animals

Commitment 3: We will be proactive in providing opportunities for the public to find out about research using animals

Commitment 4: We will report on progress annually and share our experiences

Along with over 100 other signatories the University of Hull is part of a community dedicated to endorsing, supporting and upholding these commitments by initiating projects and strategies which make the work we do transparent and available to the public. Our hope by doing this is to promote engagement, discussion, knowledge, understanding and support for the valuable work carried out by the university, and by our colleagues and fellow signatories around the UK.