

Editorial policies as a driver for change

Scientific journals are instrumental in the communication of scientific knowledge to scientists and other interested parties around the world. They play a key role in disseminating information on, and hence developing, good scientific practices. The importance of this role with respect to the use of animals in scientific research and testing has been recognised by numerous authors¹. For example Boisvert (1997) states that: "...on a practical scientific level, attention to animal welfare in explanations of experimental methods would recognise that animal care and use factors...are all critical in obtaining reliable and reproducible results...The lack of information...is inconsistent with good quality research conduct and reporting".

Particularly important with respect to animal research is the publication of information on the Three Rs (replacement, reduction and refinement) (see back page). Clear journal publication policies, and the requirement to include specific animal related information in scientific papers, facilitates the uptake and implementation of the Three Rs. This contributes to the development of more humane science, a view reinforced by the UK Nuffield Council on Bioethics in their 2005 publication *The Ethics of Research Involving Animals*. The Nuffield Council recommended that: "...all journals publishing results of research involving animals consider the inclusion of a category on the Three Rs in the methodology section".

By publishing such information journals can also have a role in stimulating informed discussion of the ethical issues that are integral to the use of animals in research and in helping to

ensure such issues are addressed. This in turn contributes to greater openness and transparency regarding the use of animals in science.

The RSPCA has reviewed many journal editorial policies that address the use of animals in research, and has used this knowledge to inform the development of an 'ideal animal welfare editorial/publication policy', with the hope of encouraging all journals to adopt such a policy tailored to their own particular publications. The Society believes this would lead to significant advances for animal welfare and the quality of science.

¹ Boisvert (1997); Smith *et al.* (1997); Alfaro (2005); Gomez and Conlee (2007); Wurbel (2007); and Sherwin (2007)



©ISTOCKPHOTO.COM/ICORRI & BACKGROUND PHOTO: ©ISTOCKPHOTO.COM/GMUTLU

Publication policy principles

In order to develop a publication policy, we believe that any journal publishing primary data originating from the observation and/or investigation of any non-human animal should:

- acknowledge that the use of animals in scientific procedures raises serious ethical and welfare issues;
- define the nature of research that editors consider is acceptable/unacceptable for publication on ethical grounds²;
- request confirmation from authors³ that research has undergone a rigorous harm-benefit analysis as part of an ethical evaluation, and that animal welfare and other Three Rs issues have been properly addressed;
- clearly explain the information that authors need to include in papers for the research to be accepted for publication and make instructions easily accessible (see 'Good practice model', overleaf);
- be prepared to publish sufficient information on experimental design, the Three Rs and animal welfare in order to help disseminate this to the wider scientific community;
- require reviewers to make sure the above points are taken into account in the papers they review;
- require adherence to the editorial policy as a stipulation for publication.

² For example, some journals will not publish research causing substantial suffering that has not been alleviated.

³ For instance, by including a statement to this effect within the article, or through the journal's licence to publish.



©ISTOCKPHOTO.COM/WILDCA7 78

Good practice model

Instructions to authors

Journal X is committed to ensuring that the research it publishes gives full consideration to animal welfare and ethical issues. Papers will only be accepted for publication if authors can confirm that:

- the research conforms to the standards set out in contemporary best practice regulations or guidelines as specified by the journal⁴;
- the research proposal went through a process of ethical review prior to the study commencing; this should include a weighing of the likely adverse effects on the animals against the benefits likely to result from the work;
- the potential for application of the Three Rs was rigorously researched prior to starting, and every opportunity was taken during the course of the study to implement each of them;
- animal husbandry and care was in accordance with contemporary best practice;
- all individuals involved with the care and use of animals were trained and skilled to an acceptable level of competency, with euthanasia carried out according to contemporary best practice; and that
- appropriate anaesthesia and analgesia were used to minimise pain and distress; and humane end-points were defined and implemented where appropriate.

Manuscripts for publication should contain details of:

- species and, where appropriate, strain of animal;
- total number of animals used throughout the study;
- experimental design including statistical design and analysis;
- other pertinent details relating to the lifetime experience of the animals, including housing and care; refinements to experimental procedures to reduce suffering; pain management; humane end-points; and euthanasia methods.

⁴ All journals should decide what guidelines they consider to be contemporary best practice in their specific area of animal research and provide direct links to these within the policy.

The Three Rs

REPLACEMENT The use of methods that avoid or replace the use of animals with humane alternatives wherever possible.

REDUCTION Minimising the numbers of animals used, for example through improving the experimental design and statistical analysis used in a study.

REFINEMENT Improving experimental procedures and other factors affecting animals, such as their housing and care, in order to reduce suffering and improve welfare throughout their lives.

References

Alfaro V. (2005). Specification of Laboratory Animal Use in Scientific Articles: Current Low Detail in the Journals' Instructions for Authors and Some Proposals. *Methods Find Exp Clin Pharmacology* **27(7)**: 495–502.

Boisvert, D.P.J. (1997). Editorial Policies and Animal Welfare. In *Animal Alternatives, Welfare and Ethics*, Eds van Zutphen L.F.M and Balls M. Elsevier: 399–404.

Gomez L.M. and Conlee K.M. (2007). An analysis of reporting pain and distress recognition and alleviation in scientific journal publications. *AATEX 14 Special Issue, Proceedings of the 6th World Congress on Alternative and Animal Use in the Life Sciences*, August 21–25, Tokyo, Japan. 171–177.

Nuffield Council on Bioethics (2005). *The ethics of research involving animals*. Ed. Nuffield Council on Bioethics, London: Nuffield Council on Bioethics.

Russell W.M.S. and Burch R.L. (1959). *The principles of humane experimental technique*. Methuen.

Sherwin C.M. (2007). Animal welfare: reporting details is good science. *Nature*, July 19, **448 (7151)**: 251.

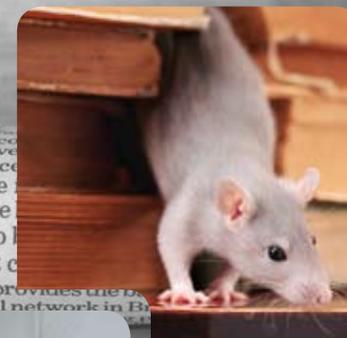
Smith *et al.* (1997). Reporting animal use in scientific papers. *Laboratory Animals* **31**, 312–317.

Wurbel H. (2007). Publications should include an animal welfare section. *Nature*, Mar 15, **446 (7133)**: 257.

FOR FURTHER INFORMATION PLEASE E-MAIL:
research_animals@rspca.org.uk

Editorial policies

of scientific journals regarding the use of animals



COVER PHOTOS: ©ISTOCKPHOTO.COM/PEEPO/IGORRYP/ETA CLIC/GMUTLU

