

Cambridge University Press

978-0-521-70348-2 - Animal Experimentation: A Guide to the Issues, Second Edition

Vaughan Monamy

Frontmatter

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Animal Experimentation

A Guide to the Issues, Second Edition

Animal Experimentation is an important book for all those involved in the conduct, teaching, learning, regulation, support or critique of animal-based research. Whilst maintaining the clarity of style that made the first edition so popular, this second edition has been updated to include discussion of genetically modified organisms and associated welfare and ethical issues that surround the breeding programmes in such research. It also discusses the

- origins of vivisection
- advances in human and non-human welfare made possible by animal experimentation
- principal moral objections to the use of research animals
- alternatives to the use of animals in research
- regulatory umbrella under which experiments are conducted in Europe, USA and Australasia.

The book also highlights the future responsibilities of students who will be working with animals, and offers practical advice on experimental design, literature search, consultation with colleagues, and the importance of the on-going search for alternatives.

Dr Vaughan Monamy is a senior lecturer in environmental science and environmental ethics at the Australian Catholic University in Sydney. In 2007 he was awarded an Australian Government Carrick Institute Citation for outstanding contributions to student learning, as well as his university's annual Excellence in Teaching award.

From the reviews of the first edition:

‘... a “must-read” for any student or scientist involved in animal experimentation at any level.’

Michael Brands, The Physiologist

‘... a clear, concise introduction to the major elements of the debate surrounding animal experimentation ... Monamy’s comprehensible text will appeal to the lay person, student and scientist alike.’

Tessa Smith, Biologist

‘... a thoughtful consideration of both the pros and cons of animal research ... an excellent guide to the issues [of which] current teachers of biology and biomedical science should take note.’

Asif A. Ghazanfar, Animal Behaviour

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We need another and a wiser and perhaps a more mystical concept of animals. . . . We patronize them for their incompleteness, for their tragic fate of having taken form so far below ourselves. And therein we err, and greatly err. For the animal shall not be measured by man. In a world older and more complete than ours they move finished and complete, gifted with extensions of the senses we have lost or never attained, living by voices we shall never hear. They are not brethren, they are not underlings; they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendour and travail of the earth.

Henry Beston (1928)

From *The Outermost House: A Year of Life on the Great Beach of Cape Cod* by Henry Beston.

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Preface to the second edition

It is now nearly ten years since Cambridge University Press published *Animal Experimentation: A Guide to the Issues* (2000). It is appropriate to reflect on what has happened since then within the accepted framework of the 'three Rs' principles (Replacement, Reduction and Refinement: Russell and Burch 1959) in animal research, education and testing. What advances, for example, have been made in the search for alternatives to the use of vertebrates in biomedical research? Are there fewer animals used in research today? Has there been a renewal of the impetus to refine experimentation with animal welfare as the priority?

To answer such questions requires a thorough reappraisal of where western biomedicine, education and safety testing are presently placing their emphases. Overwhelmingly, the extraordinary growth in research involving laboratory mice in all areas of genetic and molecular research has seen an increase in the number of animals used in scientific procedures for the first time since the 1980s. The enormous breeding programmes required to generate heterozygous strains of mice with genetic modifications has brought to bear entirely new ethical and welfare concerns regarding husbandry, housing and 'surplus' animals. What steps have been taken in Britain, Europe, the USA, Australasia and elsewhere to address this? Were existing regulatory frameworks adequate, or have relevant statutes been necessarily updated?

Iconic animal species, particularly non-human primates, continue to be used as research subjects, reflecting their importance as a model in some biomedical sciences, especially in the USA. What refinements to their lives in captivity have been made to respect their contribution to modern science?

At the end of the twentieth century general knowledge of computers and the internet was nowhere near as sophisticated as it is today. We are all more amenable to new ideas about where mass communication

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can take us. Has this been reflected in alternative methods of studying organ systems or in facilitating corpse-free dissections?

With such questions in mind, Cambridge University Press has published an updated edition of *Animal Experimentation: A Guide to the Issues*. It is, once again, aimed at life science students, some of whom will follow careers as tomorrow's researchers, but at the same time its clarity of style and balanced treatment will enable lay people and experts to read it with equal ease. Students and researchers will find a non-intimidating, easy-to-read and readily understood introduction to the principal issues in the animal experimentation debate.

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