

matter, is it clear how one should discriminate between basic animal research and the use of animal models to address human clinical problems.

In the end, this volume is an interesting exercise in articulating some of the concerns about the epistemology and applicability of animal models. It will, hopefully, cause some in the research community to be a bit more careful about making exaggerated claims about the applicability or clinical importance of such models but I do not see it as mounting a major challenge to the methodological foundations of modern medical science.

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Between Pets and People: The Importance of Animal Companionship

Alan Beck and Aaron Katcher (1996). Purdue University Press: West Lafayette. 316pp. Paperback. Obtainable from Academic and University Publishers Group, 1 Gower Street, London WC1E 6HA, UK (ISBN 1 55753 077 7). Price £13.95.

This is a revised edition of a book first published in 1983. The format remains the same, with only the order of chapters slightly altered. New information obtained since the publication of the original edition has been added and a new feature, a list of useful Internet resources, has been included. The premise for the book remains the same; research has shown that pets can be good for people's health and therefore we should explore human-companion animal relationships more closely. The authors discuss the roles pets have in our lives, both as companions and as members of the family, and how they may contribute to our health. In addition, comparisons are made between the ways in which we interact with other people and with pets, and details are presented on studies of the effects of talking to, touching and watching pets on people's blood pressure. Animal Assisted Therapy is the subject of another chapter while the importance of pets to people is explored in a chapter on pet loss. Two chapters deal specifically with some of the problems of ownership, such as dog bites, stray animals and zoonoses, and the final chapter, somewhat bizarrely, deals with how we can become better humans and parents through learning from our pets.

While this book is well-written and has a nice flowing style, it is not a balanced treatise of the topic. For while there certainly is evidence that pets can be beneficial to people's health, and this book includes some of the latest results of research, there is no information presented on studies which have shown neutral or negative effects of pet ownership. In addition, because the authors try to explain how it is that pets can help our health, they concentrate on *good* human-companion animal relationships. Undoubtedly, we can receive unconditional love, achieve improved self-esteem from our pets, and enjoy increased social interactions while walking the dog, but the reverse can happen when in the company of the less than ideal pet. Many owners become distraught if their cat does not show them much affection, some dogs fail to show excitement when their owners come home, and negative social interactions are more the order of the day when we are out gaily walking a social outcast, such as the pit bull terrier. Although I am sure that the authors are well aware of the problems of a poor human-companion animal relationship, they have failed to give them due attention. To be fair, they do mention that Animal Assisted Therapy still needs to be rigorously tested and that people have perhaps placed unrealistic expectations upon it. However, the authors have not discussed the general keeping of pets in the same way. The

negative sides to pet ownership are basically cast aside as necessary evils, as can be witnessed from the following passage in Chapter 1 (p 8). 'We will also explore the problems created by pets, for both individual people and society – there is no medicine that doesn't have some side effects'. Comparing animals to a medicine is dangerous and potentially harmful to the animals. This was brought home to me recently when a major British paper published '10 tested ways to get a long life', which included getting a pet! Deciding to obtain a pet purely for this reason is asking for trouble. The potential for failed human-pet relationships will be markedly increased and hence there will be a subsequent rise in animals unceremoniously dumped at animal shelters and/or euthanased.

To sum up, I think the book is well-written, covers a lot of interesting material and is a good starting point for those interested in human-companion animal relationships. However, I would have much preferred to have seen a more balanced text, as a lot has happened since the original book was published and there is now much more concern for the welfare of the animals. Remember, what's good for the human isn't always good for the animal.

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Welfare Aspects of Transgenic Animals: Proceedings EC-Workshop of October 30, 1995

L F M van Zutphen and M van der Meer (eds) (1997) Springer Verlag GmbH & Co KG: Berlin. 119pp. Paperback. Obtainable from the publishers, Postfach 31 13 40, D-10643 Berlin, Germany (ISBN 3 540 61839 2). Price DM138.

This collection of papers, given at a workshop organized within the framework of the European Commission's Biotechnology Programme, not only examines some welfare issues arising from the production of transgenic animals, but also ethical and legal considerations. As one would expect the issues are complex.

There is no question that some transgenic animals do suffer substantially as a result of genetic modification and changed phenotype. However as Broom and others point out, in other cases there may be no suffering, or the welfare of the animals may even be improved, and therefore each case has to be treated on an individual basis. This approach predicates a need for accurate welfare assessment of new transgenic lines, but there are problems enough, both in terms of resources and in theory, of assessing the welfare of non-transgenic animals in the laboratory. The efforts of Costa and van der Meer reported in this booklet are, therefore, welcome as they are both working on practical approaches for transgenic animal welfare assessment. Their results may also have broader benefits for the assessment of laboratory animal welfare in general.

In the UK and Europe (Article 12 of the Council Directive 86/609/EEC) there is a requirement to balance the benefits of a study to man or animal against the costs in terms of suffering. Knock out studies where a gene is disabled, often in an attempt to discover its function, are becoming more common, and can lead to major physical abnormalities and consequent suffering. In these studies it would seem very difficult to make such a judgement when by definition the researcher does not know in advance the function of the gene that he is deleting. On the other hand some researchers argue that there is no difference between