

This issue is illustrated by the recent review published by the Research Information Centre for Biology at the University of Utrecht on the state of transgenic technology in fish science and production and the ethical issues surrounding this technology. Transgenic coho salmon, containing a growth promoting gene from sockeye salmon, are 11 times larger than their natural siblings – but what of their welfare? It has been found that the transgenics swim more slowly than non-transgenic controls of the same length – but what if anything does this tell us about their welfare? Slowness in a non-transgenic salmon might be indicative of illness or pain, but if transgenics are slow is this because of pain or illness or because they are just plain slow?

Since 1985 fish have been used for fundamental and applied research in transgenic technology. For fundamental research they have some advantages over mammals, notably that they produce large numbers of eggs without the need for superovulation. Large numbers of fish are involved and work is being undertaken in countries all around the world. Various applications have been explored including: improving the economic efficiency of fish production through engineering increased growth rates, disease resistance or improved flavour; the use of transgenic fish for production of commercially useful compounds (eg insulin), and their use as biomonitors for detection of low levels of pollution. This booklet provides a useful review of various aspects of transgenic technology in fish and is a handy source of information on the subject. It is clearly written and the illustrations are, for the most part, helpful. In addition to welfare concerns, this publication addresses food safety, environmental, and social aspects (current attitudes and views on transgenic technology). The arguments are presented in a scientific and balanced style and the report will be of interest to all those interested in the debate on the rights and wrongs of genetic engineering, especially as applied to non-human animals. It ends with several recommendations, the first of which is that more welfare research is needed.

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*Transgenic Fish for Food And Science. A Technology Assessment on Transgenic Fish.* K Waelbers (1998). Research Information Centre for Biology: Utrecht. 96pp. Paperback. Obtainable from, Wetenschapswinkel Biologie, Padualaan 8/Z 401, 3584 CH Utrecht, The Netherlands (ISBN 9052090890). Price DFL/NLG 15.00 (plus DFL 15.00 overseas postage).

### **Ethical review process in academia**

The UK Government issued a requirement on 1 April 1998 that all establishments designate under the 1986 Act should have an ethical review process (ERP) satisfactorily installed by 1 April 1999. This document, which has been circulated by the Laboratory Animal Science Association (LASA) to its members, is a report of a meeting held to formulate guidelines to assist establishments in the process of setting up an ERP. The document builds on the experience of participants who had already had experience of either establishing or running an ERP, and addresses the requirements of an ERP, taking into account that different establishments will have different needs and that therefore the structure of ERPs may differ. The booklet provides a number of excellent bullet points addressing the roles of those involved in an ERP, how to review an existing ERP, and concerns that people may have about such issues as confidentiality or possible delays to experiments. LASA is to be commended for producing such a useful document in a comparatively short time. Moreover, as the ERP is seen as an evolving concept, the booklet should continue to be useful for a number of years to come.

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*The Ethical Review Process in Academia: A Laboratory Animal Science Association Roundtable Discussion to Assist in Setting up an Effective System.* Edited by Maggy Jennings, Graham Moore and Bryan Howard (1998). 50 pp. Paperback. Obtainable from The LASA Secretariat, PO Box 3993, Tamworth, Staffordshire, B78 3QU. Price on application.