

Species-specific welfare guidelines: a necessity in fish research?

Trond Brattelid, National Institute of Nutrition and Seafood Research (NIFES)

Fish are well established animal models in applied and basal experimental research disciplines including developmental, biomedical and toxicological research, and they include a wide variety of species with very different characteristics. The biological diversity of fishes, reflected in different physiological adaptations to varying conditions and behavioral differences between fish species, is not consistent with universal welfare guidelines. The establishment of acceptable welfare guidelines specific for fish species is a prerequisite for implementation of the 3R's (Reduce, Replace and Refine) in fish research.

With this background the Research Council of Norway gave Norecopa the mandate to appoint a committee to evaluate the needs for research in fish welfare in the following areas:

- Environmental needs of different fish species
- Fish welfare indicators
- Pain-induced procedures and ethically acceptable endpoints in fish.
- Pain relief treatment of fish
- Test and validation of fish vaccines

The committee has evaluated the available literature and identified important areas for research with major focus on “environmental needs of different fish species” and “fish welfare indicators”.

Recommendations given by the committee aim to increase knowledge within important fish welfare issues, to improve quality and to strengthen the implementation of the 3R's in fish research.