

# The COST initiative and fish research

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- COST aims to stimulate the Co-operation in the field of Scientific and Technical Research on a European level of nationally funded research activities
- COST covers both basic and more applied research and also addresses issues of a pre-normative nature or of societal importance



## Main characteristics of COST:

- “Bottom-up approach” - The initiative of launching a COST Action comes from the European scientists themselves
- “à la carte participation” - Only countries interested in the Action participate
- “equality of access” - Participation is open to European countries not belonging to the European Union
- “flexible structure” - easy implementation and light management of the research initiatives



## The main instruments for the support of the co-operation of scientific networks are:

- Travel and subsistence
- Subsidies
- Dissemination, Publications
- Inter-Laboratory Exchange Visits
- Workshops/Conferences/meeting support
- Assessment, monitoring and evaluation of COST Actions
- Training Schools
- COST/ESF High level research Conferences
- Annual grants



COST Actions are frequently the precursors for successful projects in the EU Framework Programme, especially in Network of Excellence programme



# COST B24

## LABORATORY ANIMAL SCIENCE AND WELFARE

- The main objective of this Action is to increase knowledge necessary for both ethically sustainable and scientifically valid use of laboratory animals in research



# SCIENTIFIC PROGRAMME

- WG 1: Housing of animals and scientific integrity
- WG 2: Refinement of procedures
- WG 3: Genetically modified (GM) animals and other new models
- WG 4: Ethical evaluation and cost-benefit analysis
- WG 5: Quality operation



# Management Committee

Year 1	Year 2	Year 3	Year 4	Year 5
WG1	WG1	WG1 Workshop		
WG2	WG2	WG2 Workshop		
	WG3	WG3	WG3 Workshop	
	WG4	WG4	WG4	
		WG5	WG5	WG5 Workshop





# Working Group 1

## Housing of animals and scientific integrity

- Define the basic welfare and scientific criteria
- Interference of housing elements with studies
- Environmental enrichment and group housing
- With efficient welfare indicators it is possible to recognise and assess refinement aspects of both animal housing and experimental procedures
- Any refinement in housing to improve animal welfare requires scientific validation to ensure the refinements are truly beneficial for the animals and do not detract from the scientific integrity of the results
- Many of the crucial recommendations in the guidelines have to be interpreted and the results of this WG will be valuable in this process



# Housing of fish for research

- Fish instincts and natural requirements
- Biology of the various fish species
- Tank enrichment
- Development of practical techniques; handling, injection methods, sampling methods, vaccination methods, anaesthesia methods
- Health monitoring
- Water quality
- Fish death as an experimental parameter - acceptable or not?



# Working group 2

## Refinement of procedures

- Design of the study - yielding valid answers to the questions asked
- The procedures with moderate to severe pain should be the primary focus of this WG. Aim of the WG in preparing best practice guidelines
- Establishment of humane endpoints
- Procedures that involve only minor pain and distress can also be refined
- Feeding regimes
- These are examples of procedures with potential for refinement. The novel dimension of this WG is to simultaneously safeguard scientific integrity



## Goals for the first meeting:

- Select topics
- Define areas of concern
- Recommendations based on science
- Establish consortia for research applications
- Prepare position paper for the FP7



## Priorities for the work of WG2:

- Most painful procedures
- Most common procedures
- Four areas for consideration were identified and discussed in subgroups:
  - Nutrition
  - Obstacles for implementation of refinement
  - Experimental design
  - Humane endpoints



- WG 3: Genetically modified animals and other new models
- WG 4: Ethical evaluation and cost-benefit analysis
- WG 5: Quality operation



- Challenges

Include fish in the work in the various Working Groups of this COST Action

