Have we reached consensus?
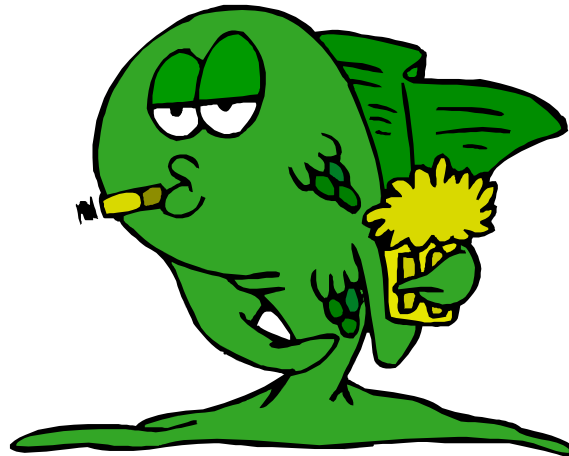
- Statistics
  - What is a research fish?
  - What are we using research fish for?
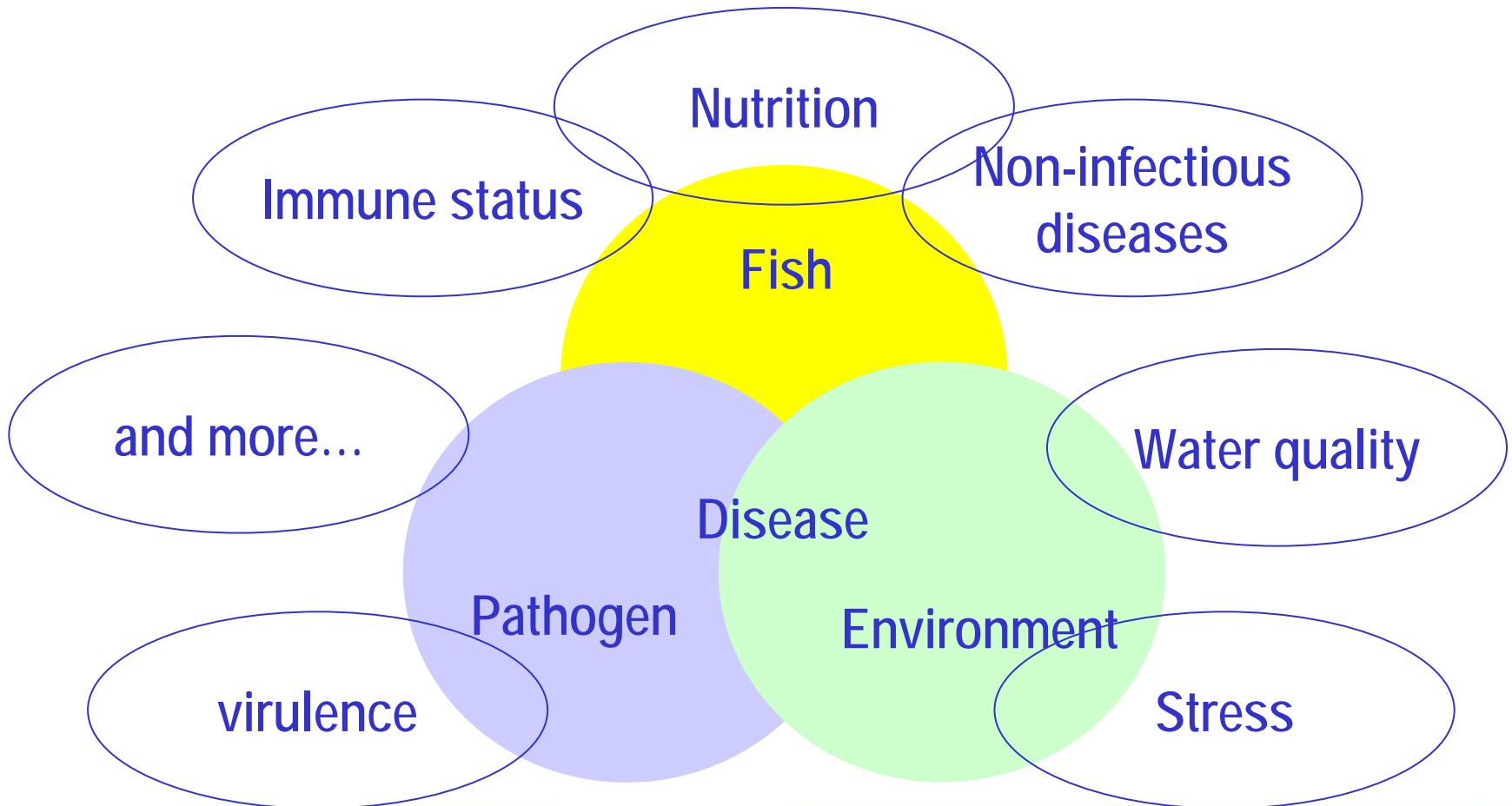 - Different categories depending on degree of "suffering"
- Inspections
  - UK "best in class?"
  - Norway "worst in class?"
- Accreditations
  - AAALAC (Will Peter be the first AAALAC fish-lab?)
  - ISO, GCP, other?

Health monitoring

We need guidelines for health monitoring of each fish species in each type of research

Two papers in preparation:
"Health and welfare monitoring of fish used in research"
"Disease monitoring of Atlantic salmon (*Salmo salar*) used in research related to aquaculture"

A lot more papers are needed on this subject!

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Guidelines

- We need a overview of what exist

- Do we want or need more guidelines?
    - Care and use
        - Procedures for blood sampling, water quality, anaesthesia, human(e) killing, tagging, etc…..
    - Health monitoring (FELASA?)

- Legislations
    - Appendix A
    - EU-directive
    - National laws (Animal welfare act)

Fish experiments required by law

- Vaccines
- Medicines
- Toxins
- Chemicals
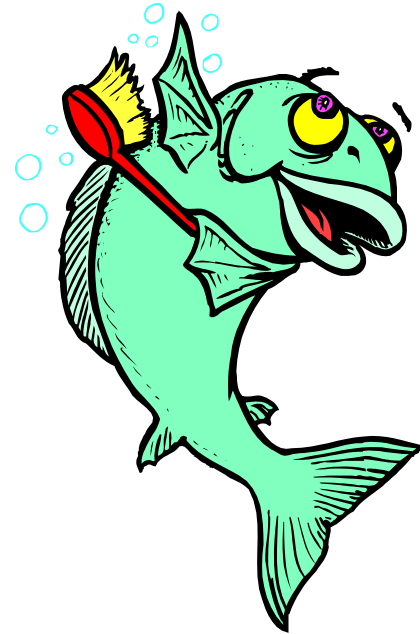- Hormone analogues
- Others?

Reduce

- **Design of fish research**
  - Number of fish that we use? (Stig Larsen)
  - Several samples from the same fish
  - Alternatives
- **Models**
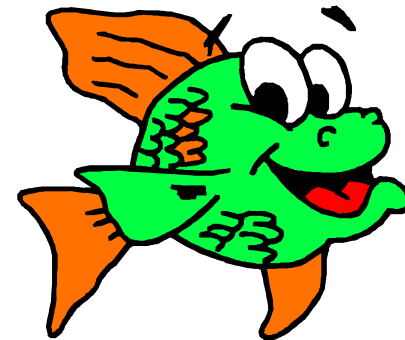 - Reproducible results
  - Standardised fish
  - More zebrafish?

Best Fishes

Relevance

- **Vaccine testing**
  - OK in experimental conditions
  - Side effects in the real world

Do fish feel pain?

- Do we need to answer this question?

- How will a positive or negative answer affect what we do?

- What research do we need to answer this question?
  - Nociception
  - Cognitive abilities

- Neurophysiological stage?

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Why do we have to treat fish well?

- Philosophical question