Advanced Health Management in Salmon Farming: Data, tools and economic impact

GBADs and DECIDE seminar series
10/07/2024

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Salmon aquaculture
Many types of data

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https://www.foodbeast.com/news/salmon-lice

Data tools

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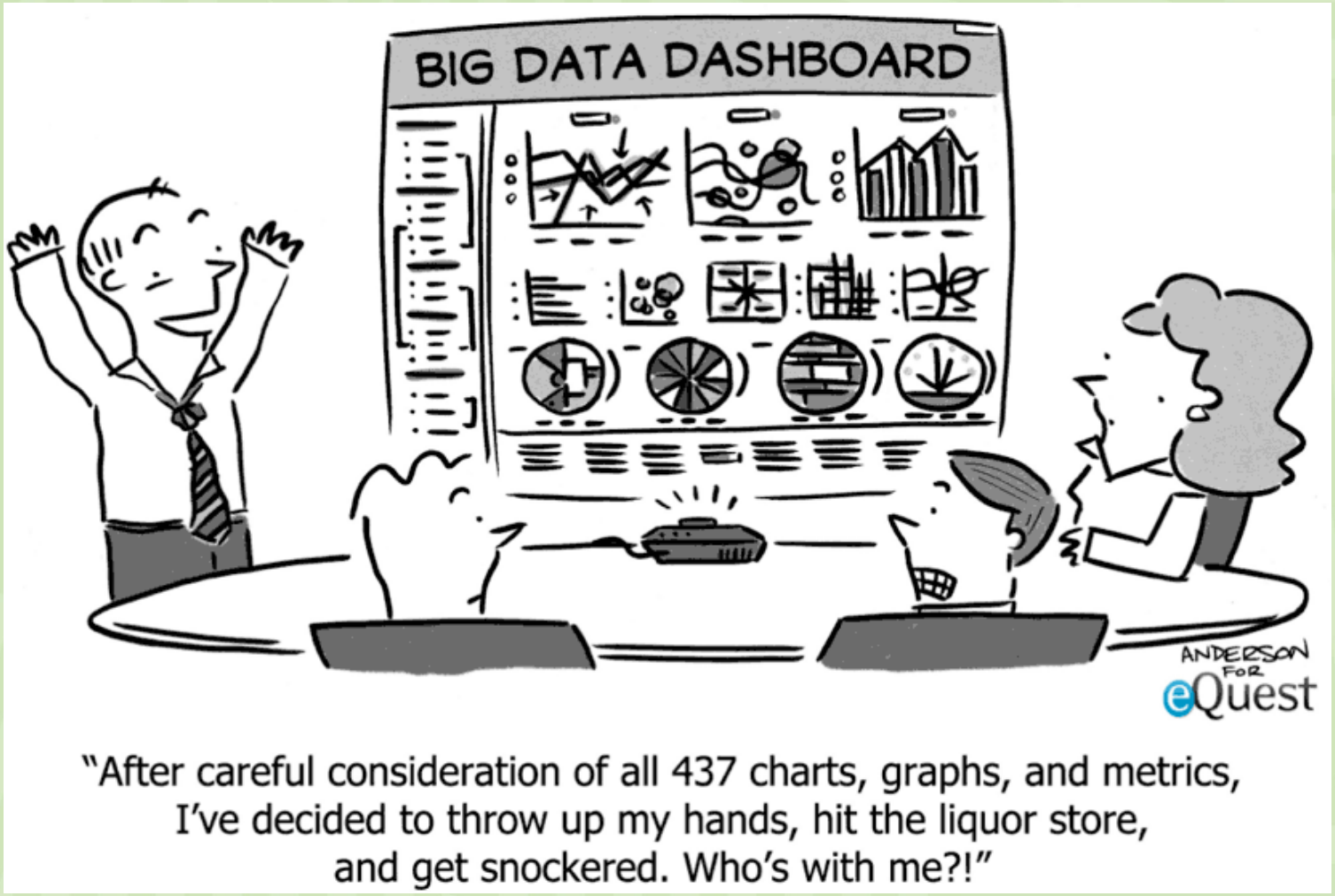

Using data to support day-to-day health management of farmed Atlantic salmon.

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https://decideproject.eu/

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101000494.

Salmon health: co-morbidity, environmental challenges
Management: lack of time, lack of treatment options, staff turn-over, standardization protocols, challenge balancing health-welfare-economics-interest

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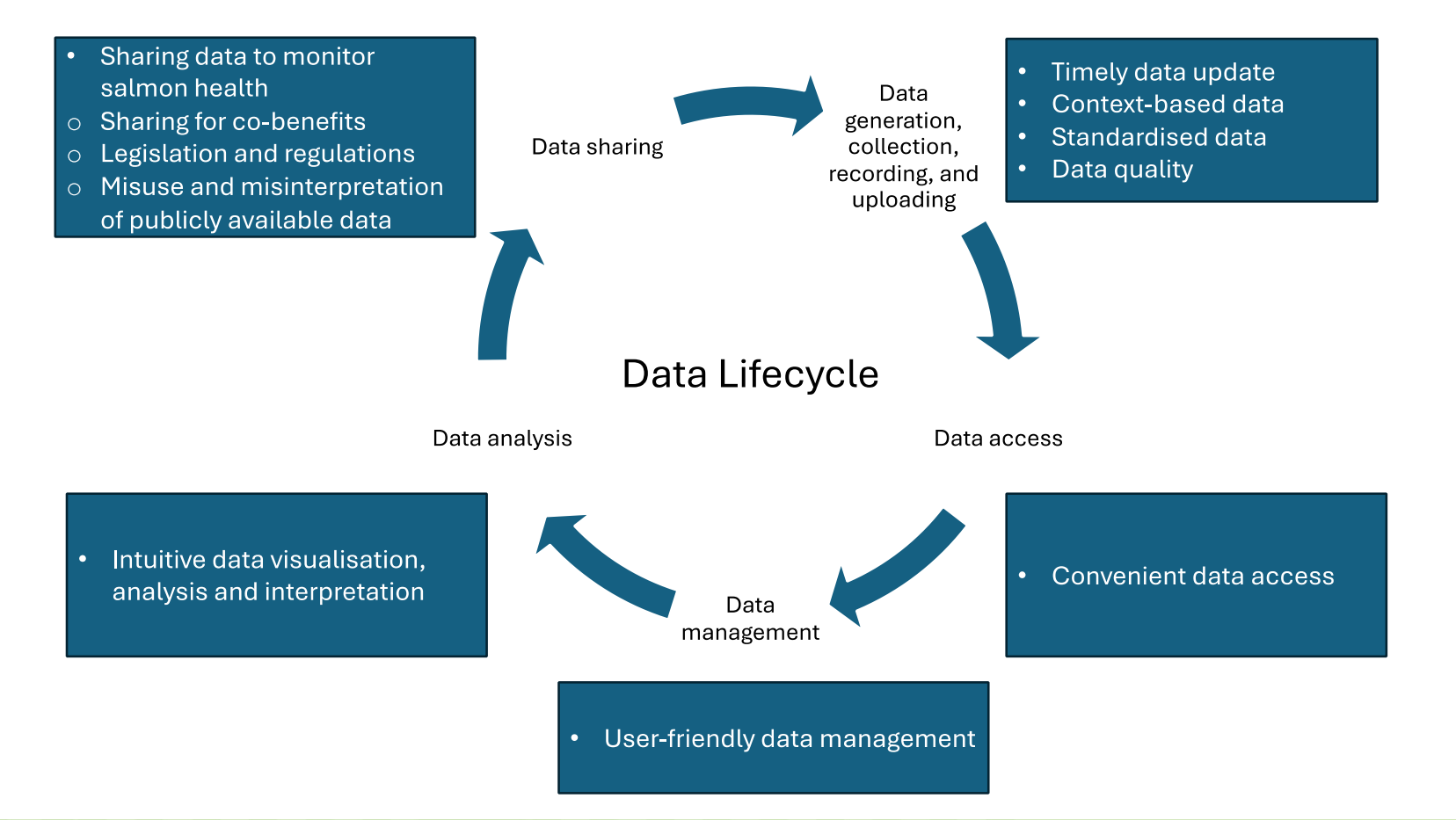
Main themes

Multifaceted challenges in salmon health management
The essential role of data in health management
Data supporting/partially driving decision-making

Other factors: historical experience, clinical picture, economic and ethical considerations, legislation & regulation

Support: clinical presentation supported by effective and efficient data use
Resources: many different digital products

Data life cycle



Data quality is key

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Data tool development

Data tools need to be:

- Stakeholder specific
  - Health managers
  - Production managers
  - Inspectors (government, certification)
- Simple
- Integrated into existing software
- Timesaving
- Provide visual dashboards
- Include a selection of only relevant information

Understanding sample size

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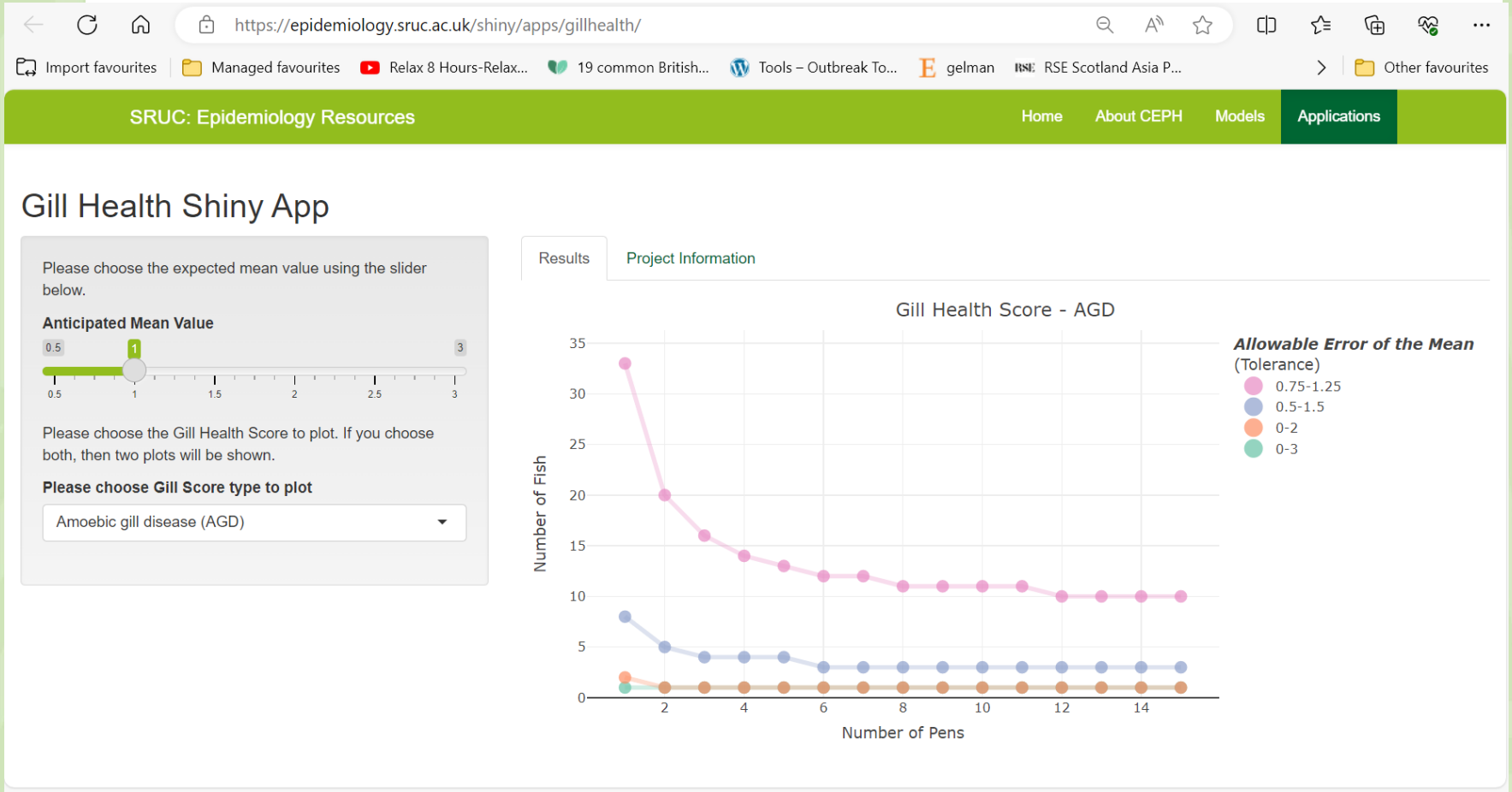
https://epidemiology.sruc.ac.uk/shiny/apps/gillhealth/



Using AI

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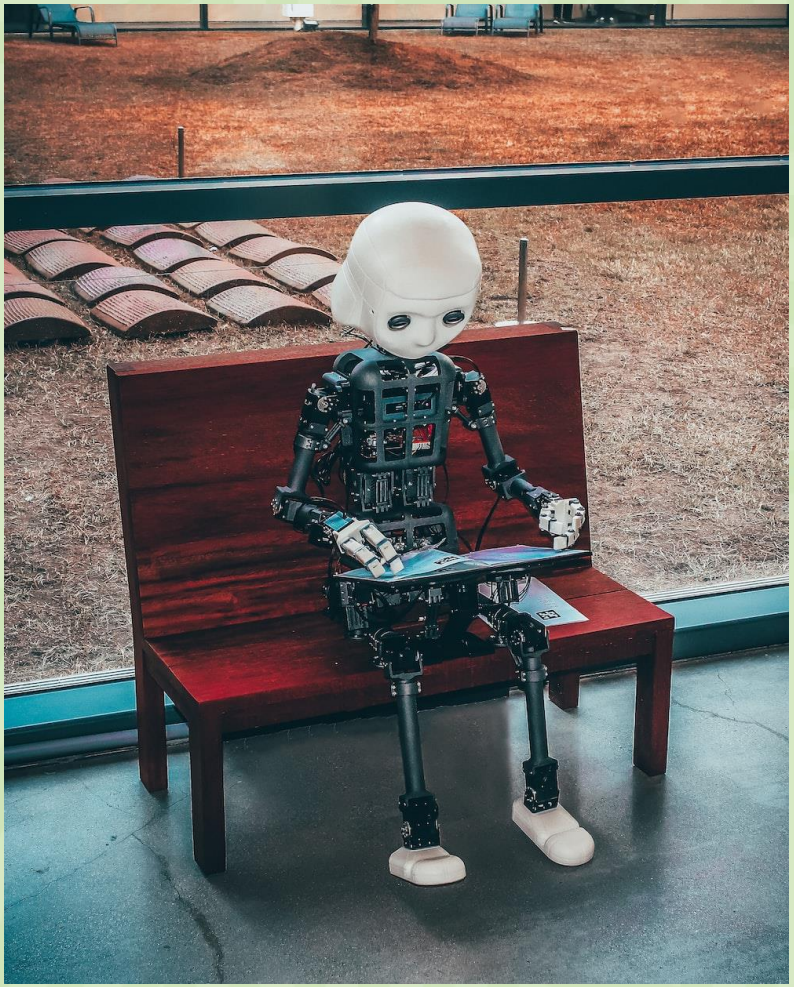
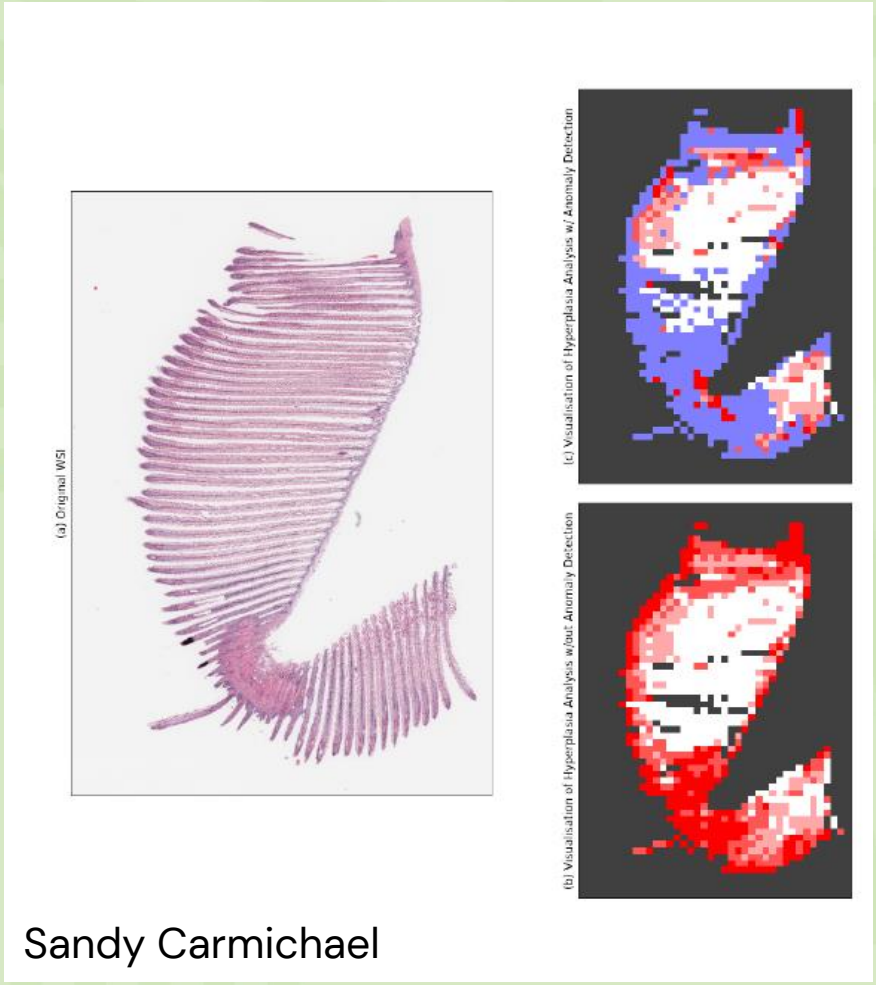


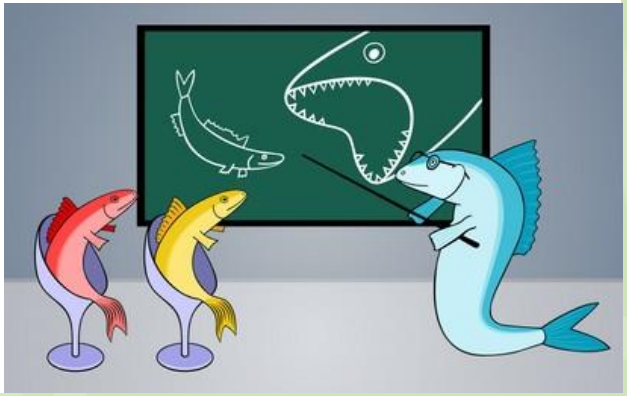


Sandy Carmichael

SRUC CPD course

2-day in-person CPD course

- *2024 Epi concepts and data visualisation for fish technicians*
- Session 1: Basic epidemiology terminology
- Session 2: Diagnostic tests: understanding test characteristics, and interpreting test results
- Session 3: Data and data visualisation
- Session 4: Evaluating and utilising statistical evidence to inform clinical judgment and practice



Take home

- Data is important in aquaculture
- Data tools can help with health management
- Communication about tools is important

DE CIDE

brings together 19 partners from 11 countries

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