

# Mixing Oil and Water and Other Data Management Solutions Or: Chocolate with Hot



# Oil and Water

- Data vs. Theory – 4th Paradigm
- Quantitative vs. Qualitative
- Prospective vs. Retrospective
- Animal vs. Human Studies
- Cellular vs. Behavioral
- One World – Many Competing Perspectives

# Classical Research vs. eScience

**“The world of science has changed, and there is no question about this.** The new model is for the data to be captured by instruments or generated by simulations before being processed by software and for the resulting information or knowledge to be stored in computers. Scientists only get to look at their data fairly late in this pipeline. **The techniques and technologies for such data-intensive science are so different that it is worth distinguishing data-intensive science from computational science as a new, *fourth paradigm* for scientific exploration”.** Jim Grey, p. xix

- Fourth Paradigm
  - “Microsoft Science”

# Omaha System

- An ontology/terminology/world view
  - Describes health
  - Generates large data sets
  - Levels outcomes
- Enables synthesis of “Oil and Water” paradigms
  - Art
  - Outcomes

- Data & Theory – 4th Paradigm
- Quantitative & Qualitative
- Prospective & Retrospective
- Animal & Human Studies
- Cellular & Behavioral
- One World – Many Converging Perspectives
  - And a unifying ontology

# What's Next?

- Innovation using standardized terminologies in places and models and ways not previously explored
  - With text and Natural Language Processing
  - As survey items
  - With research data
  - In New Zealand home care
  - In Dutch and other languages
  - In qualitative analysis

# Chocolate with Hot Pepper!

