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Open Data:
Legal and Conceptual Issues

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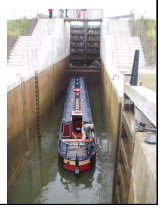
Introduction

- Creating, managing and sustaining international research commons
- INFRASTRUCTURE to support basic and applied research
- Current institutional and rule-based impediments to developing bioresources and databases
  - PART 1: DATA
  - PART 2: BIORESOURCES and ABS



Whose Data?

Building a Robust Research Commons

- Commons is a shared and managed resource that is vulnerable to social dilemmas
- Databases and biorepositories *support* research = Research commons
- A set of resources available to all researchers on terms that encourage efficiency, equitable use and sustainability that is managed by groups of varying sizes and interests

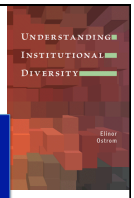
Thinking about the Commons

GOVERNING THE COMMONS

Differences between research and natural commons

a global research commons must be managed to facilitate not only use, but also re-contribution from the user community, creating a feedback loop between withdrawal, value-added research, and deposit (Schofield et al. 2010)

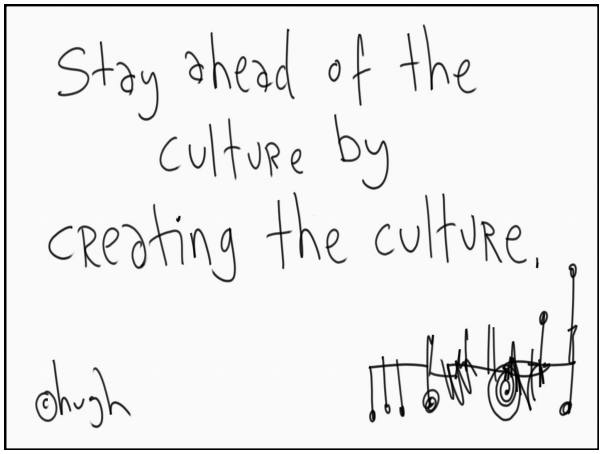
Requirements for a Robust Commons



- Cultural homogeneity
- Rules that match the structure of the community and desired outcomes.
- Active participation
- Some autonomy in rule making.
- System for self-monitoring of behaviour.
- Graduated system of sanctions.
- Access to low-cost resolution mechanisms.

Rules in Use:

- FORMAL LAWS (IP, animal welfare, FDA)
  - Often out of sync with new capabilities, community norms and technology
- CONSTITUTIONAL
  - Who may make the rules (e.g., institutional structures: PPPs, consortia, repositories, databases, etc.)
- POLICIES AND GUIDELINES – no shortage of these
  - E.g., funding agencies, universities, journals, repositories, creative/science commons
- INFORMAL RULES/ COMMUNITY NORMS/ PRACTICES
  - Citation, attribution, reciprocity and sharing, publication,



Pre vs post publication sharing

- Large scale publicly-funded projects
  - general agreement among funders
- Smaller-scale investigator-driven research projects
  - more controversial.

The Rome Agenda:

Post-publication sharing of data and tools
Schofield, Bubela et al. *Nature* 461, 171-173

- Access to data and materials
- Licensing and patenting
- Data and resource-sharing infrastructure
- Standards and tool development
- Attribution and reward
- BUT: policies are one thing and enforcement another

blication/submission
/use

References

- David Carlson, (2011) Lesson in Sharing: Earth scientists need better incentives, rewards and mechanisms to achieve free and open data exchange, ***Nature*** 469.
- Paul N. Schofield *et al.* (2010) Sustaining the Data and Bioresource Commons, ***Science*** 330.
- Toronto International Data Release Workshop (2010) Prepublication data sharing (2010) ***Nature*** 461.
- Schofield PN, Bubela T, *et al.* (2009) Post-publication sharing of data and tools. ***Nature*** 461.
- Haas MA, Park S. (2010) To Share or Not to Share? Professional Norms, Reference Groups, and Information Withholding Among Life Scientists. ***Organization Science*** 21.