

---

The changing scholarly communications landscape  
What does this mean for peer review?

Sense about Science Workshop

---

Branwen Hide

March 5<sup>th</sup>, 2010



---

# Outline

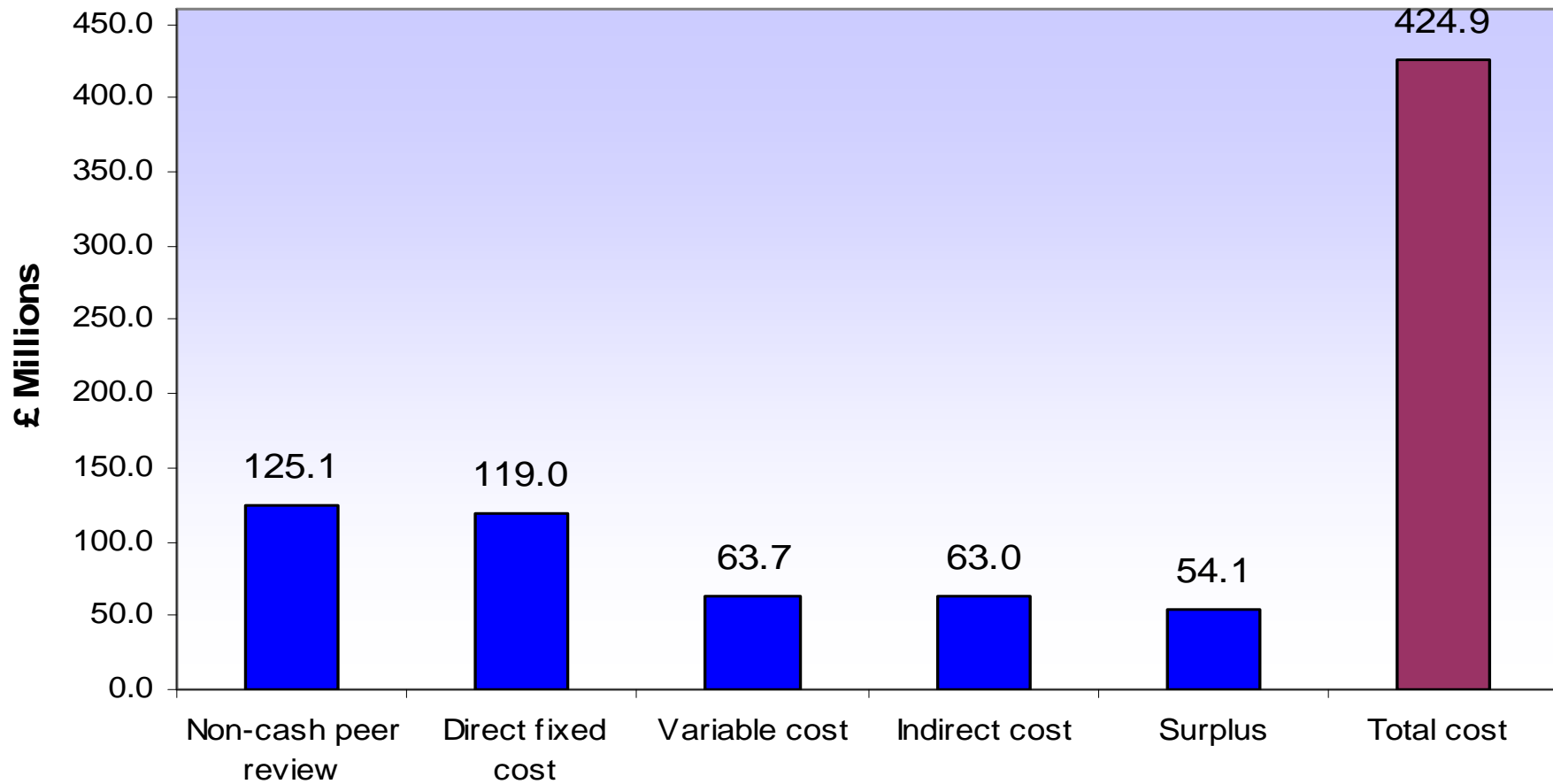
- Traditional journal publishing and the cost of peer-review
  - Changing scholarly communications landscape
  - Social media
  - The emergence of data as a publication
  - Some food for thought
-

---

# Traditional journal publishing and the cost of peer review

---

## UK Journal Article Publication and Distribution Costs



First copy cost £244.1

Publication

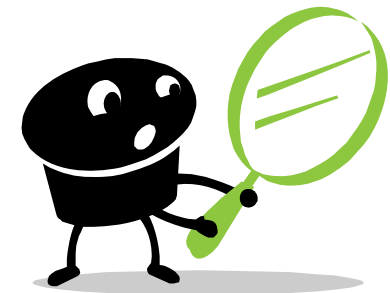


Distribution

---

# The changing scholarly communications landscape

- Move to electronic and open access publishing
    - Author-pays, pre-prints, post-prints
  - Increase use of social media for dissemination and access of information
    - Blogs, twitter, YouTube etc.
  - Publishers are also thinking of new and innovative ways of adding value to their publications
    - Publishing research data, linking to existing data bases, and enhanced annotations
    - Comment, moderate, and rating systems
      - Peer review
        - Difficult to get people to respond
- 



---

# New forms of peer review – some examples

- PLoSOne
    - 2-stage assessment
    - Handling editor is acknowledged
  - PLoSCurrents Influenza
    - Expert panel screens submissions
    - It is expected that the information will be 'officially' published at a later date
  - arXiv
    - Combination of moderators and endorsements
  - EMBO
    - Publish the 'Review Process File'
    - Reviewers remain anonymous
  - BMC Medicine
    - Publish the pre-publication history
    - Reviewers are not anonymous
  - F1000
    - This is not a journal it is a "literature awareness tool"
    - experts in the field evaluate and comment on the most interesting papers they read each month – review peer reviewed journal articles
-

---

# Social Media

- Blogs
  - ❑ valid because a number of people follow them?
  - ❑ link to peer-reviewed literature? [researchbloging.org](http://researchbloging.org)
  - ❑ Is there a role for the institution?
- Wikipedia, WikiGenes
  - ❑ actively encourages people to edit and improve the quality of the post
  - ❑ WikiGenes requires you to cite where you have got that information from when you post it
- Twitter
  - ❑ The problem of retweeting and only having 140 characters



---

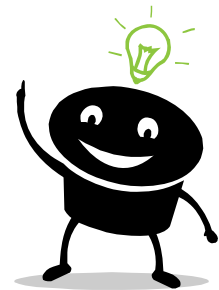
# The emergence of data as a publication

- There is a move toward the publication of research data
    - Either as a supplement to an existing article, as an independent publication, or archiving it in a database
  - Currently data that is archived is generally not subjected to peer review
    - The data creator is responsible for ensuring the quality of data
  - Personal knowledge of how the data were collected and analyzed greatly influences one trust in the data
    - This can be increased with good quality metadata that describe the origins and how the data was processed
  - Currently there are a number of discussion on the need/feasibility of formal peer review for data
-

---

# Some food for thought

- Does discipline have an affect on the type of peer review?
  - Does the type of publication influence the type of peer review?
  - Why don't commenting and rating systems work more effectively?
  - Is a new system of peer review required for blogs and other social media?
  - Can data be peer reviewed the same way as a journal article?
  - How do we asses the quality of metadata?
  - Are their training implications for researchers?
- How will the changes in the peer review process affect the public understanding (trust) of science?



---

# Branwen Hide

Liaison and Partnership Officer  
Research Information Network

---

[Branwen.hide@rin.ac.uk](mailto:Branwen.hide@rin.ac.uk)

[www.rin.ac.uk](http://www.rin.ac.uk)



## UK Costs of Scholarly Communications

