

# Open Access Publishing: An Overview

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# Overview of presentation

- Open Access is already one of the most heated topics in the field of scholarly communications
- Open Access can be achieved in two ways:
  - author self-, institutional- or subject-based archiving of papers
  - conversion of journals themselves to a free-to-access business model
- Brief historical overview of developments in Open Access

# Open Access ...defined

A method for disseminating the result of scientific research which:

- makes no charge to readers or their institutions for online access
- permits printing, copying, onward distribution and creation of derivative works, subject only to community-defined standards of attribution and integrity

# Drivers

- Academics and librarians complaining about the current toll-access system
- Governments around the world - publicly funded research should lead to free of charge access
- Wellcome Foundation's initiative
- UK House of Commons Select Committee report

# Advantages of Open Access

- Return to core value of scholarship – free exchange
- Number of accesses for OA e-journals higher than for toll-access e-journals
- Some evidence that OA articles get more citations than those in toll access journals

# Advantages of Open Access

- Moral/ethical argument – everyone around the world can get access
- Impact argument – more eyeballs means greater spread of ideas
- Cuts down costs for libraries

# Disadvantages of Open Access

- Scholars as authors have concerns:
  - peer review
  - cost
  - prestige
  - archiving
  - information overload
- Copyright issues
- Not everyone has access to the web – especially in developing countries
- It merely shifts the costs from libraries to the funding agencies or employers

# Fundamental issues

- Who owns the intellectual property generated by universities and the publicly funded research they undertake?
- Should access to that knowledge be free or restricted?
- How should it be provided and who should pay for it?



# Fundamental issues

- Where do you draw the line between what is owned by the public body which does the research and what is owned by the individual scientist?
- Is there a difference between electronic content and print?

# Traditional publishing framework

- Supports the peer review process
- Provides sophisticated indexing for access and retrieval
- Offers printed text for distribution, and a manageable format for archiving (print, microform)

# Benefits of electronic publishing

- An improved format for data presentation
- A potential archive for both new and old publications
- A huge capacity for searching
- An opportunity to build novel and innovative features into publications -- including multi-media.

# Two routes to Open Access

## 1) Open Access self-archiving

- posting of articles to either authors' personal or institutional websites
- posted article may be either pre-peer review, or post-peer review or finished PDF
- qualifying websites are interoperable and use special protocols to enable seamless recognition by search engines

# Two routes to Open Access

## 2) Open Access publishing

- creation of new journals which require authors to pay a manuscript processing fee
- fees charged by current Open Access journals are \$500-\$1,500
- recovery of fees by authors from institutions or grant funding

# Copyright issues

OA protagonists' strategies for avoiding copyright:

- refuse to sign copyright assignment
- avoid publishers who require assignment –  
[www.sherpa.ac.uk](http://www.sherpa.ac.uk) has list of publishers who offer  
OA-friendly licenses
- use an OA journal instead
- use the Oppenheim-Harnad solution (see  
[www.cogsci.soton.ac.uk/~harnad/Tp/resolution.htm#Harnad/Oppenheim](http://www.cogsci.soton.ac.uk/~harnad/Tp/resolution.htm#Harnad/Oppenheim))

# However.....

- These all require some degree of self-confidence
- No problem if academic has high reputation
- Problem if the academic is just starting out

# Not everyone has access to the web

- The idea of increasing number of eyeballs falls down when so much of the world's population has no access to telephones, networks, PCs, reliable power supplies
- Even where there is access, the costs of the hardware and software may be considered too high
- Is there any evidence of considerable un-met demand for electronic access to research output?



# Shifting the costs

- It is a zero sum game – someone has to pay for the system one way or another
- So how does it get charged for, and who has to pay?

# Author pays model for OA journals

Costs per article to break even range from \$500 to \$2000; to make a profit, need even more – maybe \$5000 (there is no reason why OA cannot be profit-making)

NB Springer Open Choice fee is \$3000

# Author pays model for OA journals

## Submission fees versus publication fees

- Submission fee – if article is rejected, author has wasted his/her money
- Publication fees – only if article is accepted, but then successful authors are subsidizing poor authors
- No easy answer, but most journals go for publication (acceptance) fee; a few go for a mixture of the two

# Who pays for OA journals?

- Funding agency
  - but then fewer funding awards overall
- Employer (University)
  - what gets cut to pay for it?
- Library
  - in which case it is no better off than before
- Author pays fees him/herself (rare)
- Fees often waived if author pleads poverty
  - but then richer authors subsidising them

# Who pays for institutional repositories?

NB costs are uncertain at the moment – but are certainly not zero!

- Library?
- Computer Services?
- Central admin?
- Individual departments?

What gets cut to pay for this?

# Brief history of Open Access

- PubMed Central
- BioMed Central
- Open Society Institute
- Budapest Open Access Initiative
- Public Library of Science
- Commercial publisher responses

# PubMed Central

- PubMed Central (PMC) is the U.S. National Library of Medicine's digital archive of life sciences journal literature
- Access to PMC is free and unrestricted
- Participation by publishers in PMC is voluntary (journals must meet PMC editorial standards)
- NLM is digitizing earlier print issues of many of the journals already in PMC

# BioMed Central

- Founded by Vitek Tracz (Current Science)
- BioMed Central's rapidly growing collection contains more than 100 journals and more than 2500 articles



# BioMed Central

Over 300 institutions have joined BioMed Central's membership program:

- the Max Planck Society
- Harvard
- Cornell
- Princeton
- Cancer Research UK
- World Health Organization
- NHS and all the universities in the UK

# BioMed Central's Institutional Membership

- Service offered to institutions to ensure widespread dissemination of research
- Processing charges automatically waived for all submissions to BioMed Central journals by researchers at member institutions
- 15% discount on BioMed Central's subscription products
- Customized page on the BioMed Central site
- Annual fee will depend on the number of research staff at company/institution

# Open access publishing

- Peer review
  - all papers are peer reviewed in the ‘traditional’ way
- Secure archiving
  - all articles are permanently archived in PubMed Central, INIST, KB, etc.
- Searchable and retrievable
  - included in PubMed, Scirus, Google, CrossRef, HINARI
  - some journals are indexed in MEDLINE, Biosis, CAS, an increasing number tracked by ISI for citations

# Budapest Open Access Initiative

- On December 1-2, 2001, the Open Society Institute (OSI, the foundation network founded by philanthropist George Soros) called a meeting in Budapest of leading proponents of Open Access for scientific and scholarly journal literature
- The goal was to see how far the many current initiatives could assist one another and how OSI could use its resources to help the cause

# OSI aims

- OSI is committed to providing initial help and funding to realize this goal
- It will use its resources and influence
  - to extend and promote institutional self-archiving
  - to launch new Open Access journals
  - to help an Open Access journal system become economically self-sustaining

# *Public Library of Science*

This initiative was founded with a \$9 million grant from the Gordon and Betty Moore Foundation in December 2002, as well as in-kind support from the Howard Hughes Medical Institute.

# PLoS goals

- Open the doors to the world's library of scientific knowledge by giving a scientist, physician, patient, or student -- anywhere in the world -- unlimited access to the latest scientific research
- Facilitate research, informed medical practice, and education by making it possible to freely search the full text of every published article to locate specific ideas, methods, experimental results, and observations
- Enable scientists, librarians, publishers, and entrepreneurs to develop innovative ways to explore and use the world's treasury of scientific ideas and discoveries

# PLoS journals

- The first journal - PLoS Biology - was published in October 2003, and a second in the field of medicine is planned for release in 2004
- Additional specialty titles and archival journals are planned for the future. The journals will cover material at the interfaces in biology, chemistry, medicine and mathematics
- They will include opinion and commentary sections, and all material will undergo rigorous and constructive peer review



# Elsevier

- Elsevier is moving towards a business model, to be implemented in the next two years, in which ‘everyone should have access to everything we have published – unlimited’
- ‘I am not against Open Access’

*Derk Haank 2003*

# Springer Open Choice

*Mr Haank says the debate, which has pitted some open-access upstarts against the industry leaders, has taken on an "unhelpful", "almost religious" emotional element.*

*Springer has responded to the call from some academics by offering journal authors a choice: publish using the traditional method or pay Springer \$3,000 once an article has been accepted and it will be disseminated for free.*

*"The responses have been very positive, because people appreciate we are listening to the market," Mr Haank says.*

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