

SCHOLARLY PUBLISHING & ACADEMIC RESOURCES COALITION SPARC EUROPE

# **Open Access - The Future** of Scholarly **Communications**

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## The Situation Today – Dissatisfaction at All Levels

#### Authors

- I Their work is not seen by all their peers they do not get the recognition they desire
- Despite the fact they often have to pay page charges, colour figure charges, reprint charges, etc.
- I Often the rights they have given up in exchange for publication mean there are things that they cannot do with their own work

#### Readers

- They cannot view all the research literature they need they are less effective
- Libraries
  - Even libraries at the wealthiest institutions cannot satisfy the information needs of their users
- I Society
  - We all lose out if the communication channels are not optimal.



## **SPARC Europe**

www.sparceurope.org

#### Scholarly Publishing &

- Academic Resources Coalition
- I Formed in 2002 following the success of SPARC (launched in 1998 by the US Association of Research Libraries)
- I Encourages partnership between libraries, academics, societies and responsible publishers
- I Originally focused on STM, but coverage expanding
- Has over 110 members in 14 countries (and is growing)
- By acting together the members can influence the future of scholarly publishing



### What is a Journal?

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Scholarly publishing comprises four functions:

| REGISTRATION | CERTIFICATION    | AWARENESS     | ARCHIVING      |
|--------------|------------------|---------------|----------------|
| Establishing | Certifying the   | Assuring      | Preserving     |
| intellectual | quality/validity | accessibility | research       |
| priority     | of the research  | of research   | for future use |

#### **Current model:**

- Integrates these functions in journals
- This made sense in print environment



# **Unlocking opportunities**

- Opportunities for **expanded access** and **new uses** offered by
  - ever-expanding networking
  - evolving digital publishing technologies and business models
- Better ways to handle increasing volume of research generated
- I Technology offers the chance for research and library communities to take back control of scholarly communication



#### **Open Access**

#### What is it?

Call for *free, unrestricted access* on the public internet to the literature that scholars give to the world *without expectation of payment*.

#### Why?

Widen dissemination, accelerate research, enrich education, share learning among rich & poor nations, enhance return on taxpayer investment in research.

#### How?

Use existing funds to pay for *dissemination*, not *access*.



#### **Budapest Open Access Initiative**

Two complementary strategies:

- Self-Archiving: Scholars should be able to
  deposit their refereed journal articles in open
  electronic archives which conform to Open
  Archives Initiative standards
- Open-Access Journals: Journals will not charge subscriptions or fees for online access. Instead, they should look to other sources to fund peer-review and publication (e.g., publication charges)

http://www.soros.org/openaccess/

# Why institutional repositories (open archives)?

#### For the Individual

- Provide a central archive of their work
- Improved discovery and retrieval
- Increase the dissemination and impact of their research
- Acts as a full CV

#### For the Institution

- I Increases visibility and prestige
- Acts as an advertisement to funding sources, potential new faculty and students, etc.
- Helps in administration, e.g., research assessment

#### **For Society**

- Provide access to the world's research
- Ensures long-term preservation of institutes' academic output





## Certification

# www.sparceurope.orc

#### Certification gives:

- Authors Validation of their work (important for promotion and grant applications)
- Readers Quality filter
- I Journals provide peer review and give a 'quality stamp' to research and authors
- I Journals should be open access



# The Four Functions of a Journal







### Utopia!

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- All research material freely available in a world-wide network of interoperable repositories
- Peer-reviewed papers receive quality stamp from journals, financed by authors not readers
- All peer-review papers are freely available to anybody with internet access

# Theory Into Practice Institutional Repositories

- I GNU EPrints Southampton
- I D-Space MIT
- I CDSWare CERN
- ARNO Tilburg, Amsterdam, Twente
- SHERPA UK

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- DARE The Netherlands
- \$12 million grant for repositories in Australia
- Over 500 open access repositories worldwide
- SPARC Resources –

(http://www.arl.org/sparc/core/index.asp?page=m0)

# Theory Into Practice Open Access Journals

- Lund Directory of Open Access Journals (<u>http://www.doaj.org/</u>) – lists over 2200 peerreviewed open access journals
- PLoS Biology (launched 2003 IF 13.9), PLoS Medicine (2004), PLoS Computational Biology, PLoS Genetics, PLoS Pathogens (2005)
- BioMed Central (published over 15,000 papers)
- New Journal of Physics (IF 3.095)
- Indian Academy of Sciences has made their 11 journals available free online

## **Open Access Journals – Making** the Transition

- A number of 'traditional' publishers are transforming their closed access journals into open access journals:
  - Proceedings of the National Academies of Science (PNAS)
  - Oxford University Press
  - American Institute of Physics
  - Company of Biologists
  - American Physiological Society
  - American Society of Limnology and Oceanography
  - I Springer
  - I Blackwell's



#### **The Power of Open Access**

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Open access PNAS papers have 50% more full-text downloads than non-open access papers

http://www.library.yale.edu/~llicense/ListArchives/0505/msg01580.html

Tim Brody from Southampton has shown that papers for which there is also a free version available have, on average, greater citations than those that are only available through subscriptions

http://citebase.eprints.org/isi\_study



#### **Open Access Policies**

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We are seeing an increasing number of policies relating to open access from:

- I Research groups
- I Universities
- I Research centers
- I Funding bodies
- I Governments
- I National and international bodies

# Berlin Declaration in Support of Open Access

- Our mission of disseminating knowledge is only half complete if the information is not made widely and readily available to society.'
- I Issued on 22<sup>nd</sup> October 2003
  - Signatories

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- Germany: Fraunhofer Society, Wissenschaftsrat, HRK, Max Planck Society, Leibniz Association, Helmholtz Association, German Research Foundation (DFG), Deutscher Bibliotheksverband
- **France:** CNRS, INSERM
- Austria: FWF Der Wissenschaftsfonds
- Belgium: Fonds voor Wetenschappelijk Onderzoek Vlaanderen, Fonds National de la Recherche Scientifique (FNRS)
- Greece: National Hellenic Research Foundation
- China: Chinese Academy of Sciences, National Science Foundation China (NSFC)
- **I Italy:** Rectors of almost all of Italy's universities

http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html



### **Wellcome Trust**

- www.sparceurope.org
- The Wellcome Trust is an independent research funding charity which currently spends over £400 million per annum.
- The Trust is working with the National Library of Medicine (NLM) to establish a European site for PubMed Central.
- From October 1 2005, it became a condition of funding that copy of any **original research paper** published in a peerreviewed journal must be deposited into PubMed Central (PMC).
- Existing grant holder's are 'strongly encouraged' to deposit.
- From October 1 2006, the condition to deposit in PMC will become mandatory to all grant holders, irrespective of award date (NB. This applies to **new** papers from this point forward)
- The Trust will provide grantees with additional funding to cover the costs of page processing charges levied by open access publishers

http://www.wellcome.ac.uk/doc\_WTX022827.html

#### **Research Councils UK – Draft Statement in Support of Open Access**

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- The seven Research Councils in the UK spend approximately £2.1billion annually
- 'Ideas and knowledge derived from publicly-funded research must be made available and accessible for public use, interrogation, and scrutiny, as widely, rapidly and effectively as practicable.'
- From 1 October 2005 grant holders will be required to deposit their journal and conference papers in a suitable institutional or discipline-based repository as soon as possible after publication, provided that:
  - There are no copyright and licensing restrictions;
  - A suitable repository exists
- Research Councils will include in grants funds to cover publication charges for open access journals.
- Expecting final policy 'any day now'. There will not be a single policy to cover all Research Councils, but (it is believed) each Council will be free to adopt its own policy

http://www.rcuk.ac.uk/access/index.asp



# **US National Institutes of Health**

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Political Interest:

- US Congress instructed the National Institutes of Health (NIH) to develop new access policy
- Originally, copies of all papers reporting research funded by NIH would have been be deposited in PubMed Central six months after publication
- Final announced policy grant recipients are 'requested' to deposit their papers up to 12 months after publication
- Approximately 60,000 papers each year could be made freely available as a result of the policy
- However, uptake of voluntary policy has been disappointing (about 4%)

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html

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#### **European Commission Study**

- www.sparceurope.org
- 'Study on the economic and technical evolution of the scientific publication markets in Europe'
- Connected to the EC's objective of 'establishing a genuine European Research Area and [their] aim to raise the profile of European research'
- Looking at:
  - What are the main changes in Europe?
  - What and who is driving change and why? If there is any resistance to positive change, what/who is blocking it?
  - What are the consequences for users (authors, readers, libraries)?
- Launched 15 June 2004

http://www.europa.eu.int/comm/research/press/2004/pr1506en.cfm

# **European Commission Study**

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- Concludes that '...policies should make sure that the market is sufficiently competitive and 'dissemination-friendly'. In particular, they should address the need to:
  - enhance access to research output;
  - prevent strategic barriers to entry and to experimentation.
- Recommendation A1. Guarantee public access to publicly-funded research shortly after publication
  - Research funding agencies ... should promote and support the archiving of publications in open repositories, after a ... time period to be discussed with publishers. This archiving could become a condition for funding.
  - The following actions could be taken at the European level: (i) Establish a European policy mandating published articles arising from EC funded research to be available after a given time period in open access archives, and (ii) Explore with Member States and with European research and academic associations whether and how such policies and open repositories could be implemented.

http://europa.eu.int/comm/research/science-society/pdf/scientific-publicationstudy\_en.pdf



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## **European Commission Study**

#### **RECOMMENDATION A3. 'Extended quality' rankings of scientific journals**

1 ...dimensions related to the **quality of dissemination** (self-archiving authorisation, publisher archiving provisions, copyright provisions, abstracting and indexing services, reference linking, etc.) could be tracked explicitly and possibly valued by research funding bodies.

#### **RECOMMENDATION A5.** Foster interoperable tools to improve knowledge visibility, accessibility and dissemination

1 This could be achieved by (i) supporting research and development on interoperability issues, notably on metadata to improve scientific information search and retrieval efficiency and on the XML format to improve and accelerate the overall publishing process, and by (ii) promoting the wide implementation of linking technologies,... and of interoperable standard protocols, especially the OAI-PMH that enables metadata harvesting and searching across different platforms.

#### **RECOMMENDATION C2.** Further investigation

- 1 ... evolution of copyright provisions. While publishers have become more permissive over time, in particular in terms of the posting of published material on individual web pages, it would be good to investigate precise legal solutions that would provide legal certainty to authors, but also potentially to other parties, in terms of dissemination of published material.
- 1 ... technological developments: Research could be supported for example on interoperability issues and on the specifics of long-term preservation issues.

# **European Commission Study**

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- The EC funds relatively little research directly, especially compared to the member states. Plans are in place to increase this funding (with a pan-European funding council?), however, an open access policy would not affect large numbers of papers.
- The one area the Commission does have great power in is scrutinising mergers. The study may feed into future merger and acquisition decisions.
- Overall, the greatest value of the study may be PR and as a call to action for the member states



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#### **Open Access – A Policy Issue**

**Research Organisations:** 

- CERN Requires researchers to deposit papers in the CERN repository
- CNRS (Centre National de la recherche scientifique)

Institutions:

- Queensland University of Technology
- Bielefeld University
- I University of Bremen
- I University of Hamburg
- Universidade do Minho
- I University of Southampton
  - Case Western Reserve University
- University of Oslo

http://www.eprints.org/signup/fulllist.php



## What Institutions Are Doing

#### Self-archiving:

- Set-up and maintain institutional repository.
- Help faculty deposit their research papers, new & old, digitizing if necessary.
- I Implement open-access policies

#### Open-access journals:

- Help promote open access journals launched at their institution become known externally.
- Ensure scholars at their institution know how to find open access journals and archives in their fields.
- Support open access journal 'institutional memberships' (e.g. BioMedCentral, PLoS)
- Engage with politicians and funding bodies to raise the issue of open access

http://www.createchange.org/

# Open Access – Appealing to All the Major Stakeholders

- www.sparceurope.org
- To the funders of researcher both as a public service and as an increased return on their investment in research
- I To the authors as it gives wider dissemination and impact
- I To readers as it gives them access to all primary literature, making the most important 'research tool' more powerful
- I To editors and reviewers as they feel their work is more valued
- I To the libraries as it allows them to meet the information needs of their users
- I To the institutions as it increases their presence and prestige
- I To small and society publishers as it gives them a survival strategy and fits with their central remit



#### **Create Change!**

"Although the battle is being fought over subscription prices, what is really at stake...is the scientific process itself."

New York Times, Dec. 8, 1998

"An old tradition and a new technology have converged to make possible an unprecedented public good."

Budapest Open Access Initiative, Feb. 14, 2002

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