

SCHOLARLY PUBLISHING & ACADEMIC RESOURCES COALITION SPARC EUROPE

# **Open Access in Europe: Policy and Practice**

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# The Situation Today – Dissatisfaction at Many Levels

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- Authors
  - 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.
  - 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
- Funders
  - Want to see greater returns on their research investment
- Society
  - We all lose out if the communication channels are not optimal.



### **SPARC Europe**

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#### Scholarly Publishing & Academic Resources Coalition

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



## The Effect of the Internet

- Opportunities for expanded access and new uses offered by
  - ever-expanding networking
  - evolving digital publishing technologies and business models
- New dissemination methods
- Better ways to handle increasing volume of research generated
- 75% of journals (83% in STM) now online



### **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**

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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)

# What are institutional repositories (open archives)?

#### Essential elements

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- *Institutionally defined:* Content generated by institutional community
- *Scholarly content:* preprints and working papers, published articles, enduring teaching materials, student theses, data-sets, etc.
- *Cumulative & perpetual:* preserve ongoing access to material
- Interoperable & open access: free, online, global

# Why institutional repositories?

#### • 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

- Increases visibility and prestige
- Acts as an advertisement to funding sources, potential new faculty and students, etc.
- Helps in administration, e.g., Research assessment and evaluation
- For Society
  - Provide access to the world's research
  - Ensures long-term preservation of institutes' academic output



### What is a Journal?

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Scholarly publishing comprises four functions:

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

#### **Current model:**

- <u>Integrates</u> these functions in journals
- This made sense in print environment





## **Certification**

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



### **The Four Functions of a Journal**





# Theory Into Practice Institutional Repositories

- GNU EPrints Southampton
- D-Space MIT

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- CDSWare CERN
- ARNO Tilburg, Amsterdam, Twente
- Fedora Cornell University / University of Virginia
- SHERPA UK
- DARE The Netherlands
- DRIVER EC

• SPARC Resources –

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

# Theory Into PracticeInstitutional Repositories

OpenDOAR (Directory of Open Access Repositories)

- An authoritative directory of academic open access repositories
- Lists over 1000 repositories
- Can be used to search across content in all listed repositories
- Gives information on repository polices (copyright, re-used of material, preservation, etc.)
- Repositories listed in Poland:
  - Biblioteka Cyfrowa Politechniki Łódzkiej (eBiPol)
  - Biblioteka Cyfrowa Uniwersytetu Wrocławskiego
  - Biblioteki Cyfrowej Politechniki Warszawskiej
  - Dolnośląska Biblioteka Cyfrowa
  - Kujawsko-Pomorska Biblioteka Cyfrowa
  - <u>Małopolska Biblioteka Cyfrowa (Digital Library of Malopolska)</u> (MBC)
  - <u>Pedagogical Digital Library</u> (Pedagogiczna Biblioteka Cyfrowa)
  - Wielkopolska Biblioteka Cyfrowa
  - Zielonogórska Biblioteka Cyfrowa (ZBC)

http://www.opendoar.org/ http://new.arl.org/sparc/repositories/

# Theory Into Practice Open Access Journals

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- Lund Directory of Open Access Journals (<u>http://www.doaj.org/</u>) – lists over 2950 peerreviewed open access journals
- PLoS Biology (launched 2003 IF 14.7), PLoS Medicine (2004), PLoS Computational Biology, PLoS Genetics, PLoS Pathogens (2005)
- *BioMed Central* (published over 29,000 papers)
- *Hindawi* (publishes 80 open access journals)
- Scientific Electronic Library Online (SciELO-<u>http://www.scielo.org/index.php?lang=en</u>) – 279 titles open access online

## Theory Into Practice – Hybrid Open Access Journals

- Authors have option of whether or not to make their papers open access (for a fee)
- Over time, as proportion of authors who pay increases subscription prices can fall
- Eventually, entire journal is open access

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- A number of 'traditional' publishers are transforming their closed access journals into open access journals (Proceedings of the National Academies of Science (PNAS), American Institute of Physics)
- Oxford University Press has announced reduced 2008 subscription rates for some journals as a result of level of take-up by authors

# The Power of Open Access – Self Archiving

- For 72% of papers published in the *Astrophysical Journal* free versions of the paper are available (mainly through ArXiv)
- These 72% of papers are, on average, cited **twice** as often as the remaining 28% that do not have free versions.

Figures from Greg Schwarz

• 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

## The Power of Open Access – Journals

• Open access *Proceedings of the National Academies of Science (PNAS)* papers have 50% more full-text downloads than nonopen access papers

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

• ...and are on average twice as likely to be cited

http://biology.plosjournals.org/perlserv/?request=getdocument&doi=10.1371/journal.pbio.0040157



### **Open Access and Public Policy**

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We see a unique coming together of:

- Agents for change:
  - The 'knowledge economy' (e.g. the Lisbon agenda)
  - Accountability and assessment 'value for money'
  - E-Science / E-Research
  - Concerns regarding access to data
    Freedom of information
- Technological changes (Internet, Digital publishing technologies)
- New business models

Leading to an increasing number of public policies relating to open access from:

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

## Open Access Policies – 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.'
- Signatories should promote open access by
  - encouraging researchers/grant recipients to publish in open access.
  - encouraging the holders of cultural heritage to support open access by providing their resources on the Internet.
  - developing means to evaluate open access contributions and online-journals in order to maintain the standards of quality assurance and good scientific practice.
  - advocating that open access publication be recognized in promotion and tenure evaluation.
- Issued on 22<sup>nd</sup> October 2003

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

# Berlin Declaration in Support of Open Access

- 245 signatories world-wide, including:
  - **Germany:** Fraunhofer Society, Wissenschaftsrat, HRK, Max Planck Society, Leibniz Association, Helmholtz Association, **German Research Foundation**, Deutscher Bibliotheksverband
  - France: CNRS, INSERM
  - Austria: FWF Der Wissenschaftsfonds
  - **Sweden:** Swedish Research Council, Swedish Library Association, Association of Swedish Higher Education
  - China: Chinese Academy of Sciences, National Science Foundation China (NSFC)
  - Italy: Rectors of almost all Italy's universities
  - **Spain:** Rectors and Chancellors of 13 universities, Spanish National Research Council (CSIC)
  - Belgium: 17 Higher education rectors and ministers
  - **Poland:** Stowarzyszenie Wikimedia Polska



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### **Open Access Policies**

The Wellcome Trust, UK

• From October 1 2006, it became a condition of funding that copy of any **original research paper** published in a peer-reviewed journal must be deposited into PubMed Central (PMC). <u>http://www.wellcome.ac.uk/doc\_WTX022827.html</u>

Research Councils, UK

• Six of the seven UK research Councils require deposit of papers in freely accessible electronic repositories. <u>http://www.sparceurope.org/press\_release/RC%20OA%20policies%20v1.5.xls</u>

National Institutes of Health (NIH), US

- Grant recipients are 'requested' to deposit their papers up to 12 months after publication
- Low uptake of voluntary policy (about 4%) has resulted in moves to change the 'request' to a mandate. <u>http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html</u>

Canadian Institutes of Health Research (CIHR), Canada

• Proposed a <u>Draft Policy on Access to CIHR-funded Research Outputs</u> to require deposit of papers in suitable repositories

- '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

- 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



- The EC hosted a conference on scholarly communication in Brussels in February 2007.
- Before the meeting a SPARC Europe and the Knowledge Exchange partners cosponsored petition collected 22,000 signatories calling on the Commission to adopt the study's recommendations. (<u>http://www.ec-petition.eu/</u>)
  - University associations
  - Portuguese Rectors Conference, Hochschulrektorenkonferenz (Germany), Irish Universities Association, Finnish Council of University Rectors, Association of Swedish Higher Education, Norwegian Association of Higher Education Institutions, Conference of Italian University Rectors
  - Research funders
  - European Research Council, Deutsche Forschungsgemeinschaft, German Research Council, Austrian Science Fund, Spanish National Research Council, Wellcome Trust, Swiss National Science Foundation, CNRS, INRIA, Medical Research Council, Association of Medical Research Charities (UK), Max Planck Society, Swedish Research Council
  - National academies
  - Royal Swedish Academy of Sciences, Royal Swedish Academy of Letters, History & Antiquities, Royal Flemish Academy of Arts and Sciences, Lithuanian Academy of Sciences, Royal Scientific Society of Jordan, Schweizerische Akademie der Geistes- und Sozialwissenschaften, Royal Netherlands Academy of Arts and Sciences, Academia Romana, **Hungarian Academy of Sciences**





- The conference was inconclusive, but the Commission has issued a 'Communication' which includes:
  - A commitment to include open access publishing costs in EC grants
  - The promise of specific guidelines to be issued, within specific programmes, on the publication of articles in open repositories.
  - Significant funding for repository infrastructure and digital preservation
  - Funding of research on publication business models and on the scientific publication

# Specific Guidelines within Specific Programmes'

- In March, a draft <u>FP7 Grant Agreement</u> required grantees to submit electronic copies of their journal articles to the EC and permits the EC to redistribute them online.
- The draft was adopted on 10<sup>th</sup> April:
  - Article II.12.2, *Information and communication*....The Commission shall be authorised to publish, in whatever form and on or by whatever medium, the following information:...the publishable reports submitted to it; ...
  - Article II.30.4, *Dissemination*....Furthermore, an electronic copy of the published version or the final manuscript accepted for publication shall also be provided to the Commission at the same time for the purpose set out in Article II.12.2 if this does not infringe any rights of third parties....
- Peter Suber describes this as 'the heart of an OA mandate.'



- The EC has just published a Green Paper <u>The European Research Area: New</u> <u>Perspectives</u>
- **Effective knowledge sharing.** This should consist of: open and easy access to the public knowledge base.
- Generation, diffusion and exploitation of knowledge are at the core of the research system. In particular, access to knowledge generated by the public research base and its use by business and policymakers lie at the heart of the European Research Area, where **knowledge must circulate without barriers** throughout the whole society.
- Europe should stimulate the development of a 'continuum' of accessible and interlinked scientific information from raw data to publications...
- Is there a need for EU-level policies and practices to improve and ensure open access to and dissemination of raw data and peer-reviewed publications from publicly funded research results?
- Invites researchers and research organisations, higher education establishments, businesses, civil society organisations and citizens directly, to engage in the debate and to respond to the public consultation launched with this Green Paper (by 31 August 2007).



## **Self-Archiving Policies**

**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
- University of Bremen
- University of Hamburg
- University of Lund
- Universidade do Minho
- University of Southampton
- Case Western Reserve University
- University of Oslo

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

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## What Should a Policy Look Like?

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- Berlin 3 meeting, held 28 February 1 March 2005 in Southampton provided a simple template for an open access policy.
- In order to implement the Berlin Declaration institutions should:

1) Implement a policy to require their researchers to deposit a copy of all their published articles in an open access repository.

and

2) Encourage their researchers to publish their research articles in open access journals where a suitable journal exists and provide the support to enable that to happen.



### **Open Access – A Policy Issue**

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Open Access policies are:

- Welcomed by authors
- Complied with by authors
- Compatible with copyright and respect authors' moral rights
- Compatible with patent registration
- Respectful of academic and intellectual freedoms
- Aligned with the aims of most funding bodies and institutions
- Effective!

# Policy Issues – What we need to do next

- We need to engage policy makers at all levels:
  - Within institutions
  - Within funding bodies
  - Nationally at the political level (and open access is a non-partisan issue).
  - Internationally at bodies such as the EC, UN, OECD, etc.
- We need to show widespread support for open access, so please sign (and encourage others to sign) the European and US petitions in favour of open access:
  - European <u>http://www.ec-petition.eu/</u>
  - US <u>http://www.arl.org/petition/</u>
- We need to continue to build and develop excellent open access resources

# Open Access – Appealing to All the Major Stakeholders

- To the funders of researcher both as a public service and as an increased return on their investment in research
- To the authors as it gives wider dissemination and impact
- To readers as it gives them access to all primary literature, making the most important 'research tool' more powerful
- To editors and reviewers as they feel their work is more valued
- To the libraries as it allows them to meet the information needs of their users

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- To the institutions as it increases their presence and prestige
- To small and society publishers as it gives them a survival strategy and fits with their central remit



### **Create Change!**

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#### "It is one of the noblest duties of a university to advance knowledge, and to diffuse it not merely among those who can attend the daily lectures--but far and wide."

Daniel Coit Gilman, First President, Johns Hopkins University, 1878 (on the university press)

"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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