



THE SCHOLARLY PUBLISHING  
& ACADEMIC RESOURCES COALITION  
21 Dupont Circle NW, Suite 800  
Washington, DC 20036  
(202) 296-2296  
[www.arl.org/sparc](http://www.arl.org/sparc)

# A Question of Access

## Public Policy and Repositories

Heather Joseph, Executive Director

The Scholarly Publishing and Academic Resources Coalition

Washington, DC

USA

# About SPARC

- Active coalition of academic & research libraries (currently in U.S., Canada, Europe and Japan)
- Initiative to address market imbalances in the scholarly communication system.
- At the core of SPARC's mission is the belief that these imbalances inhibit the advancement of scholarship and are at odds with fundamental needs of scholars and the academic enterprise.

# SPARC's Mission

SPARC was formed by the library community specifically to be a catalyst for action, in order to stimulate new systems that:

- expand dissemination of research results
- reduce financial pressures on libraries
- leverage the networked digital environment to better serve scholarship

# SPARC's Three Program Areas

- Educating stakeholders on problems and opportunities for change in scholarly communications;
- Incubating demonstrations of business and publishing models that advance changes benefiting scholarship and the academy;
- Advocating policies that support use of technology to advance scholarship, and recognize that dissemination is an essential component of the research process

# A Focus on Open Access

- Immediate free, online availability of research results that scholars produce without expectation of payment
- A *vision* of scholarly communication in the networked digital environment, where:
  - user toll barriers to research access are eliminated
  - potential usage is maximized
  - the value of research is more fully realized
- An *access* model, not a *business* model

# Why A Focus on Open Access?

*“Open access serves scholarly communication by: facilitating text-mining; data and literature integration; construction of large-scale knowledge structures; and creation of co-laboratories that integrate the scholarly literature directly into knowledge creation and analysis environments...”*

*It also honors our commitments to the democratization of teaching, learning, scholarship, and access to knowledge throughout our society and globally.”*

*- Clifford Lynch, CNI, Closing comments, ARL/CNI/SPARC Public Access Forum, October 20, 2006*

# Worldwide Trend Towards Promoting Greater Access

- Trend towards considering greater access to federally-funded research results (beginning to focus on not just peer reviewed articles, but data as well).
- Indicative of new understanding of opportunities presented by digital research environment to more fully exploit results of research collectively funded by the public.
- Viewed as competitive advantage, leading to greater innovation.

# Selected Proposed Policies Worldwide

- The European Commission
- Research Councils UK
- Canadian Institute of Health Research
- Ukrainian National Parliament
- South African Academy of Sciences
- German Research Fund (DFG)
- Chinese Academy of Science
- U.S. National Institutes of Health
- U.S Federal Research Public Access Act



# Public Access Spurs Innovation

*“Governments would boost innovation and get a better return on their investment in publicly funded research by making research findings more widely available.... And by doing so, they would maximize social returns on public investments.”*

**-- International Organization for Economic Cooperation and Development, Report on scientific publishing, 2005**

# Public Access Spurs Innovation

*“Once a critical mass is reached, text mining will **enable new facts to be discovered** that would not be possible by humans, such as information about gene associations. Data meshing will also start to happen where, for example, you could look at associations between supermarket loyalty cards (to find out what people eat), their health records and gene make up. **This will have a huge impact on public health.**”*

***--Robert Terry, Senior Policy Advisor, The Wellcome Trust  
(Research Information, June/July 2006)***

# Public Access is a Market Issue

From industry analysts at Credit Suisse First Boston:

*“[W]e would expect governments (and taxpayers) to examine the fact that they are essentially funding the same purchase three times: **governments and taxpayers fund most academic research**, pay the salaries of the academics who undertake the peer review process and fund the libraries that buy the output, without receiving a penny in exchange from the publishers for producing and reviewing the content... **We do not see this as sustainable in the long term**, given pressure on university and government budgets. “*

*- (Credit Suisse First Boston, Sector Review: Scientific, Technical and Medical Publishing. April 6, 2004.)*

# Public Access is Important to: Libraries

- According to recent statistics by the Association of Research Libraries, even the wealthiest private research institution in the U.S. can afford **access to less than 70% of the peer reviewed research** that they want to provide for their users.
- For thousands of public and private colleges, universities, and research centers in the U.S. the situation is even worse.

# Public Access is Central to Higher Education

*“The broad dissemination of the results of scholarly inquiry and discourse is essential for higher education to fulfill its long-standing commitment to the advancement and conveyance of knowledge. Indeed, it is mission critical.”*

**--25 U.S. University Provosts, in an Open Letter to the Higher Education Community, 7/24/06**

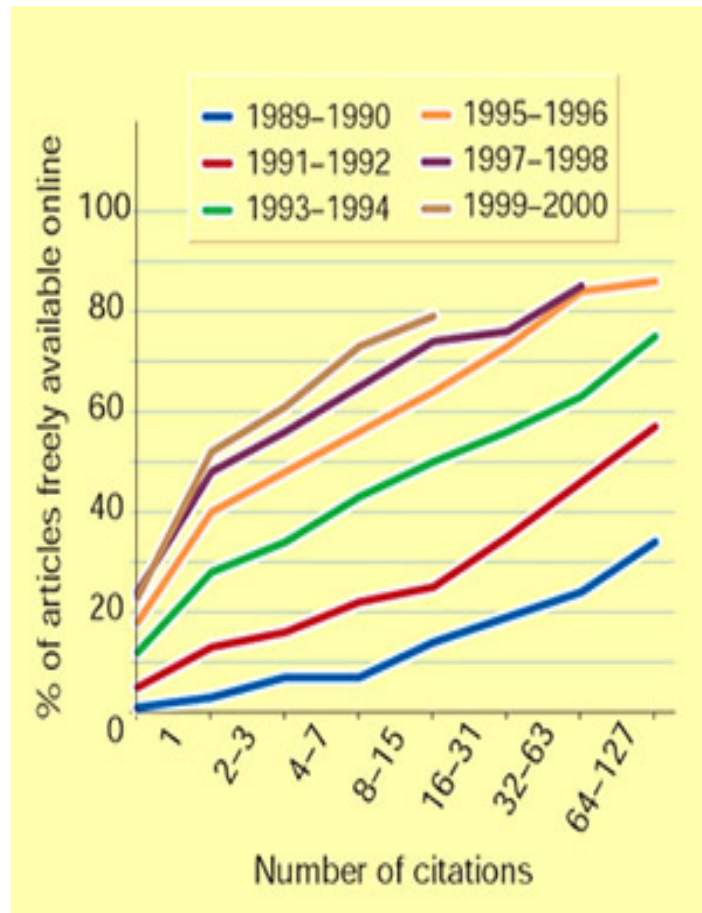
# Public Access is Important to Researchers

Recognition of the importance of public access is rapidly expanding. In a letter to the U.S. Congress 25 Nobel Laureates noted:

*“Science is the measure of the human race’s progress. As scientists and taxpayers too, we therefore object to barriers that hinder, delay or block the spread of scientific knowledge supported by federal tax dollars – including our own works.”*

*- Open letter to the US Congress, August 26, 2004*

# Public Access is Important to: Researchers



## Research Article

### Citation Advantage of Open Access Articles

Gunther Eysenbach<sup>1</sup>

<sup>1</sup> Centre for Global eHealth Innovation, University Health Network; and Department of Health Policy, Management and Behaviour, University of Toronto, Toronto, Ontario, Canada

Open access (OA) to the research literature has the potential to accelerate research findings, but its actual effects are controversial. This was a longitudinal cohort of OA and non-OA articles published between June 8, 2004, and December 8, 2004, in the journal (*PNAS: Proceedings of the National Academy of Sciences*). Article characteristics and citation data were compared between the two groups at three different points (December 2004, 0–6 mo after publication), in April 2005 (4–10 mo after publication), and in October 2005 (10–16 mo after publication). Potentially confounding variables, including journal impact, submission track, country of corresponding author, and discipline, were adjusted for in logistic and linear multiple regression models.

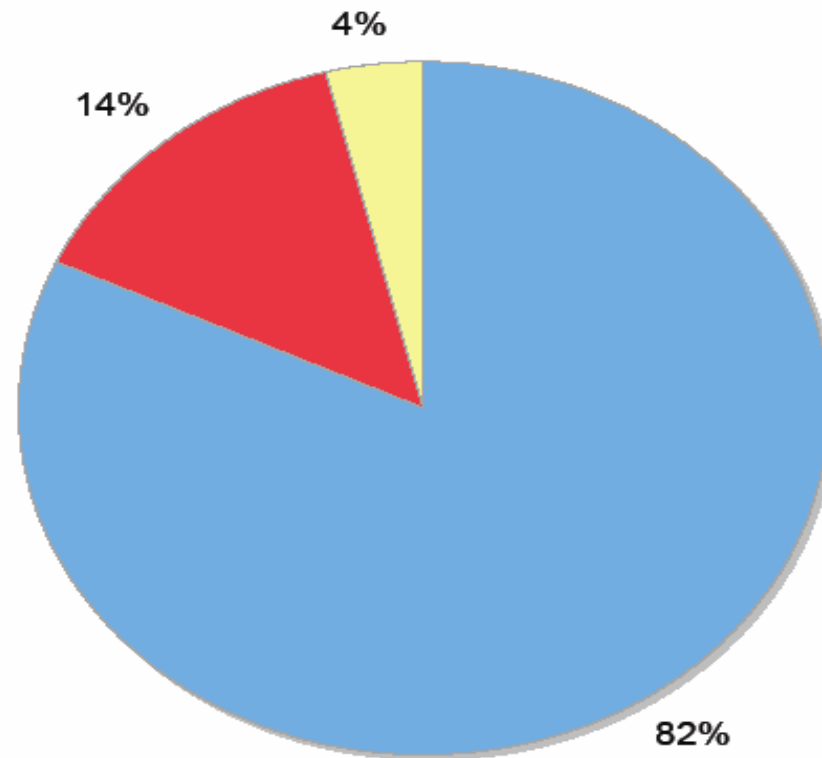
[www.arl.org/sparc](http://www.arl.org/sparc)

Lawrence, Steve (2001). "Free online availability substantially increases a paper's impact." *Nature*, Vol. 411, No. 6837, p. 521



# Public Access Is Important to: Taxpayers

. If tax dollars pay for scientific research, people should have free access to results of the research on the Internet.



■ Agree ■ Neither Agree Nor Disagree ■ Disagree

SPARC



# Some Publishers Recognize Competitive Advantage

- American Journal of Pathology (American Society for Investigative Pathology)
  - American Journal of Human Genetics (American Society for Human Genetics)
  - Annals of Family Medicine (American Academy of Family Physicians)
  - Annals of Internal Medicine (American College of Physicians)
  - Antimicrobial Agents and Chemotherapy (American Society for Microbiology)\*
    - (note ASM has 9 primary journals with 4 month embargos)
  - Applied and Environmental Microbiology (American Society for Microbiology)
  - Canadian Medical Association Journal (Canadian Medical Association)
  - Clinical Medicine & Research (Marshfield Clinic)
  - Clinical and Vaccine Immunology (ASM)
  - Development (Company of Biologists)
  - Diabetes (American Diabetes Association)
  - Genetics (Genetics Society of America)
  - Journal of Cell Biology (Rockefeller University Press)
  - Journal of Clinical Investigation (American Society for Clinical Investigation)
  - Journal of Experimental Medicine (Rockefeller University Press)
  - Journal of Neuroscience (Society for Neuroscience)
  - Molecular Biology of the Cell (American Society for Cell Biology)
  - Nucleic Acids Research (Oxford University Press)
  - Pediatric Research (American Pediatric Society)
  - Proceedings of the National Academy of Sciences (National Academy of Sciences)
  - RNA (The RNA Society)
- [www.arl.org/sparc](http://www.arl.org/sparc)

# Common Themes in Global Public Access Policies

- Dissemination of results is an inseparable, essential component of research and of the Government's investment in science.
- Expedite, expand and strengthen the national ability to leverage collective investments in scientific research.
- Provide new avenues for use of federally funded research results to stimulate new discoveries and new innovations.
- Increase funders' ability to track results of research in which they have invested - increasing both transparency and accountability.

# Selected Proposed Policies Worldwide

- The European Commission
- Research Councils UK
- Canadian Institute of Health Research
- Ukrainian National Parliament
- South African Academy of Sciences
- German Research Fund (DFG)
- Chinese Academy of Science
- U.S. National Institutes of Health
- U.S Federal Research Public Access Act

# Common Elements in Public Access Policies

- Deposit of copy of final manuscript that has been accepted for publication in a peer-reviewed journal into online repository
- Deposit in a stable digital repository that provides free public access, interoperability, and long-term preservation
- Free, public availability of manuscript as soon as possible, (range: 6-12 months) after publication in a peer-reviewed journal.

# Emerging Elements in Public Access Policies

- Option of deposit in open repository (w/embargo) or Open Access journal (no embargo)
- Explicit recognition of inclusion of deposit of data (primary and supplementary)
- Multiple repositories vs single central repository
  - i.e., “Portable” PubMed Central
  - Cross-Agency collaborations (FRPAA)
  - Public/private partnerships (Agencies/Universities)
- *Discussions* of provisions to provide funding

# Selected Resources for Additional Information

- [www.arl.org/sparc](http://www.arl.org/sparc)
- [www.taxpayeraccess.org](http://www.taxpayeraccess.org)
- [http://europa.eu.int/comm/research/science-society/pdf/scientific-publication-study\\_en.pdf](http://europa.eu.int/comm/research/science-society/pdf/scientific-publication-study_en.pdf)
- <http://www.dfg.de/lis/openaccess/>
- <http://www.cihr-irsc.gc.ca/e/32005.html>
- <http://www.rcuk.ac.uk/access/default.htm>
- <http://publicaccess.nih.gov/>
- <http://cornyn.senate.gov/index.asp?f=record&lid=1&rid=237171>