



THE SCHOLARLY PUBLISHING
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A Question of Access

Evolving U.S. Policies and Practices

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Washington, DC

USA

A Foundation for Discovery

If sharing of knowledge is the foundation of scholarly advancement, then faster and wider sharing will fuel its progress.

GOALS OF OPEN ACCESS

Accelerate
Discovery

Stimulate Further
Discovery

Translate Knowledge
into Public Benefits

Improve
Information Access &
Sharing

Reduce
Systemic Cost &
Inefficiency

Enable New Research
Strategies
(e.g., data mining)

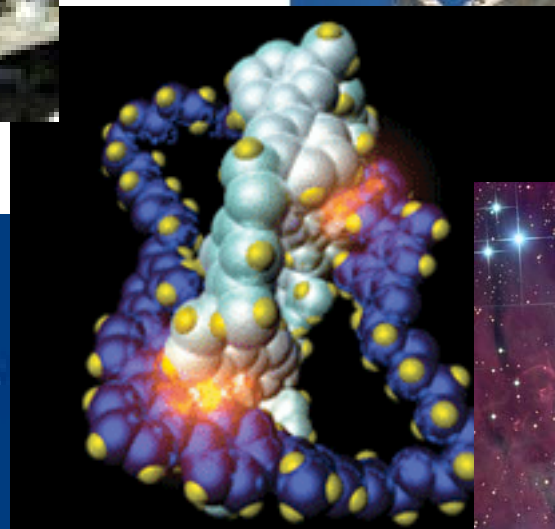
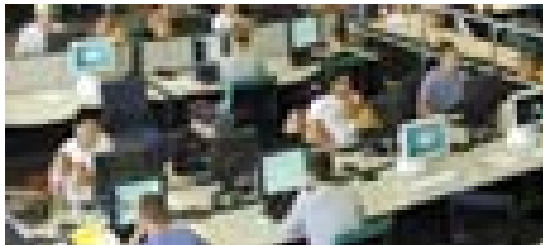
The Issue

- Funders invest in research with the expectation that it will result in improvements to the public good.
 - spur the advancement scientific discovery
 - lead to greater innovation
 - provide economic stimulus
- The recognize that dissemination is an essential component of the research process.
- Research is cumulative - science advances only through **sharing** of results. Only through **use** of research findings that funder's obtain **value** from their investment in research.

The Research Environment



the stoa consortium



The Issue

- Internet provides new opportunity to bring information broader audience at virtually no marginal cost.
- Too often, research paid for by public institutions is simply not widely available.
- **Result:** Call for new framework designed to eliminate access barriers to allow research results to be more easily **accessed** and **used**.

Calls For Action

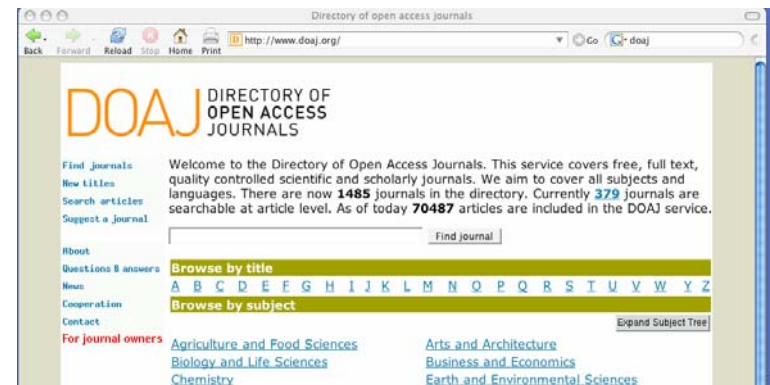
- Recognition that new opportunities existed for better dissemination was initially articulated in a series international “declarations,” notably:
 - Budapest Open Access Initiative (2002)
 - Bethesda Statement on Open Access (2003)
 - Berlin Declaration on Open Access to Knowledge in Science and the Humanities (2003)
 - Salvador Declaration on Open Access (2005)

Open Access Strategies

1. **Open-access journals** – require alternative business models to replace subscription-based models.

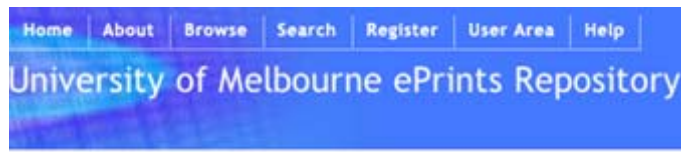


www.doaj.org



Open Access Strategies

2. **Open Access Archives** - publicly available digital repositories, exist alongside traditional publishing.



arXiv.org e-Print archive

Getting Started Latest Headlines

Automated e-print archives Search Form Interface Catchup Help

11 Oct 2005: Software reversion to restore arXiv stability.
7 Sep 2005: Proposed physics reorganization scheme announced.
For more info, see cumulative "What's New" pages.
Robots Beware: indiscriminate automated downloads from this site are *not* permitted.

KU ScholarWorks: Home

Getting Started Latest Headlines

The University of Kansas
KU ScholarWorks

Home
KU Information Services
Help
About KU ScholarWorks

KU ScholarWorks >

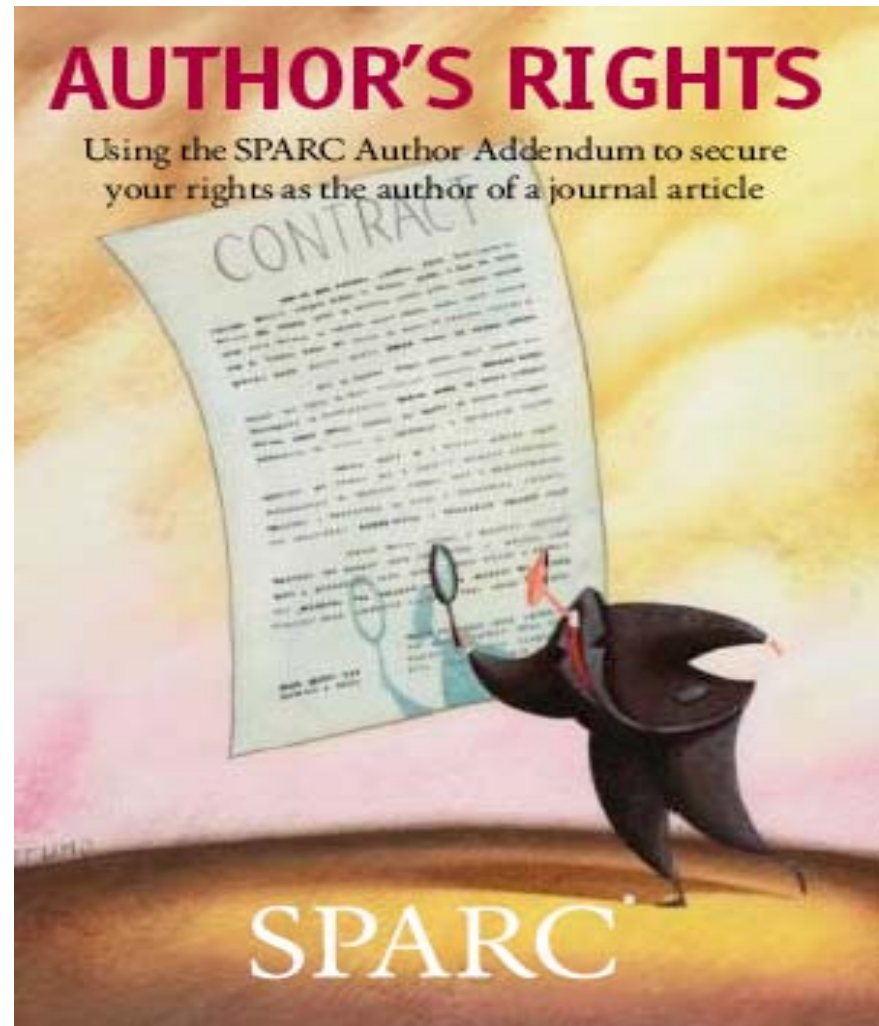
Welcome to KU ScholarWorks

KU ScholarWorks is a digital repository for scholarly work created by the faculty and staff. KU ScholarWorks makes important research available to a wider audience and helps assure that the work is preserved for future generations.

Faculty at KU are encouraged to deposit their scholarly work; see the Resolution on Access to Scholarly Works Passed by the KU University Council. Contact us for further information: [kuscholarworks](http://kuscholarworks.ku.edu)

Open Access Strategies

3. **Managing Copyright** - educating authors to enable them to ensure maximum distribution and use of scholarly output



Open Access Strategies

4. Advocacy - encourage policy makers (at the local, institutional, national and international) level to adopt policies that enable open access to research results.



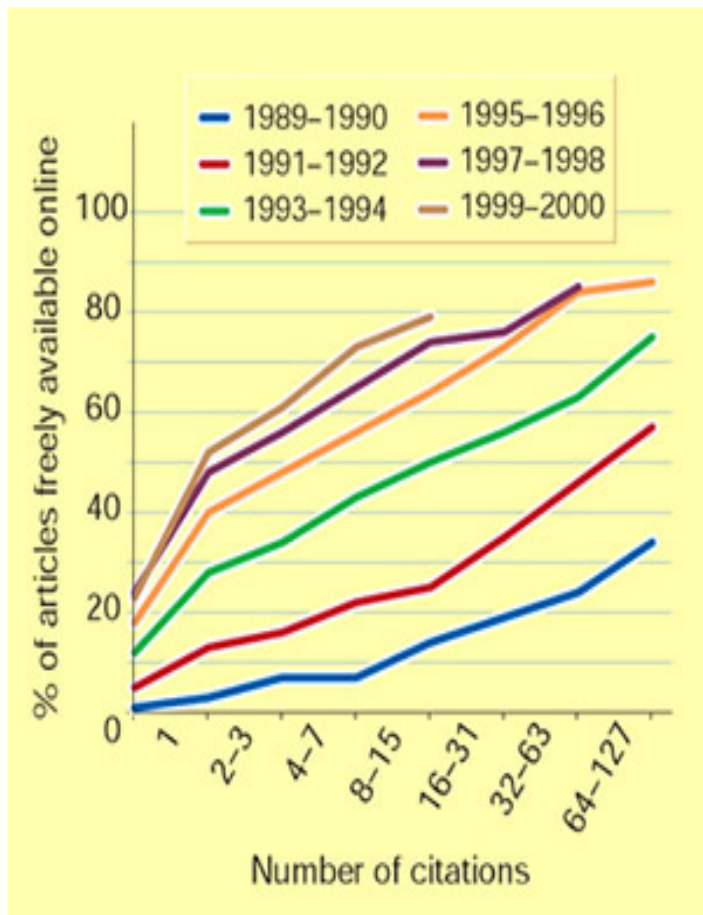
Greater Access is Important to Researchers

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

Greater Access is Important to: Researchers



Research Article

Citation Advantage of Open Access Articles

Gunther Eysenbach¹

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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 2004 in the journal (*PNAS: Proceedings of the National Academy of Sciences*). Article 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 number of citations, journal impact, submission track, country of corresponding author, and discipline, were adjusted for in logistic and linear multiple regression models.

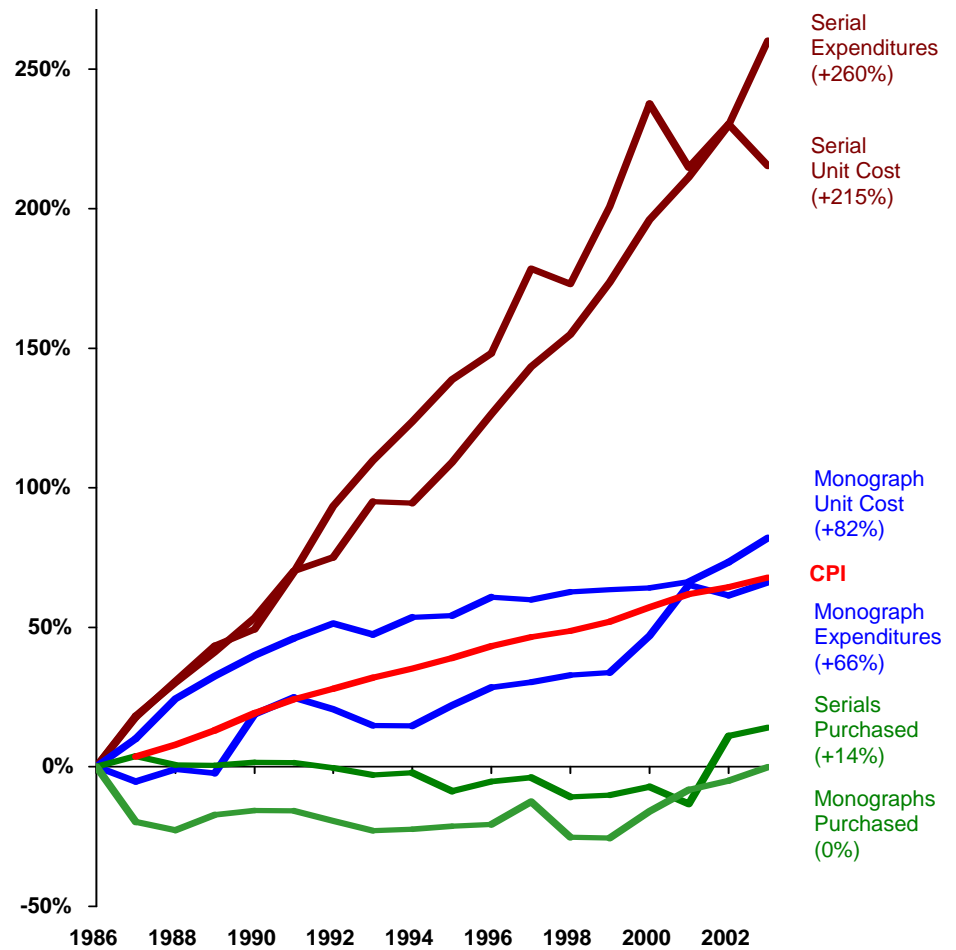
Greater Access Enables Researchers

*“ 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)

Greater 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.



Greater 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**

Greater 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.)

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)
- 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)

Public Access is a Public Policy Concern

“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

Selected Proposed Policies

- The European Commission
- Research Councils UK
- Canadian Institute of Health Research
- German Research Fund (DFG)
- 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.

Common Themes in 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**.

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

Selected Resources for Additional Information

- www.arl.org/sparc
- www.taxpayeraccess.org
- 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>