

# Transparency in U.S. Science Policy

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# Disclosure / Disclaimer

- Current employer: OMB Watch
- Former employers:
  - American Library Association
  - Scholarly Publishing and Academic Resources Coalition
- My own work
- Not endorsed by them

# Transparency: public policy issue

- "There has been nothing in our time like this administration's obsession with secrecy."  
– Bill Moyers re: President George W. Bush, 2005
  
- "Let me say it as simply as I can: transparency and the rule of law will be the touchstones of this presidency."  
– President Barack Obama, 2009

# Transparency: science policy issue

- Congressional hearings in 2008 and 2010
- Presidential memorandum in 2009
- Provisions of the America COMPETES Reauthorization Act of 2010
- National Academies' Board on Research Data and Information (2009 – present)

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Published online 18 March 2009 | *Nature* 458, 272 (2009) | doi:10.1038/458272b

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## NIH research to become permanently open access

The annually renewable public-access policy first implemented by the US National Institutes of Health (NIH) a year ago was made permanent in a spending bill signed into law on 11 March. The provision specifies that all NIH-funded investigators must submit an electronic version of their peer-reviewed manuscripts to the National Library of Medicine's PubMed Central. The manuscripts must be made publicly available no later than 12 months after publication.

The new law specifies that it must be implemented in a manner consistent with copyright law. Congressman John Conyers (Democrat, Michigan) is hoping to use that clause to upend the policy. His Fair Copyright in Research Works Act would amend US copyright law to forbid federal agencies from making funding agreements, such as NIH grants, conditional on authors making copies of their peer-reviewed articles freely available. ■

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PERSPECTIVE

## Challenges and Opportunities of Open Data in Ecology

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### ABSTRACT

Ecology is a synthetic discipline benefiting from open access to data from the earth, life, and social sciences. Technological challenges exist, however, due to the dispersed and heterogeneous nature of these data. Standardization of methods and development of robust metadata can increase data access but are not sufficient. Reproducibility of analyses is also important, and executable workflows are addressing this issue by capturing data provenance. Sociological challenges, including inadequate rewards for sharing data, must also be resolved. The establishment of well-curated, federated data repositories will provide a means to preserve data while promoting attribution and acknowledgement of its use.

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POLICY FORUM

SCIENCE AND BUSINESS

## Conflicts of Interest--Moving Beyond Disclosure

Thomas R. Cech and Joan S. Leonard\*

Author Affiliations

Management of conflicts of interest at research universities requires balancing the benefits of faculty entrepreneurial activities with the danger that such activities could distract faculty from their primary mission and threaten free inquiry. The Howard Hughes Medical Institute has developed policies to minimize these conflicts; for example, its scientists may consult for a company or engage in uncompensated scientific collaboration with it, but not both. Implementation of such policies is best accomplished by requiring faculty to obtain pre-approval of all commercial agreements, rather than simply disclosing them after the fact.

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## EDITORIAL

### Clinical Trial Registration: A Statement from the International Committee of Medical Journal Editors

Catherine De Angelis, M.D., M.P.H., Jeffrey M. Drazen, M.D., Prof. Frank A. Frizelle, M.B., Ch.B., M.Med.Sc., F.R.A.C.S., Charlotte Haug, M.D., Ph.D., M.Sc., John Hoey, M.D., Richard Horton, F.R.C.P., Sheldon Kotzin, M.L.S., Christine Laine, M.D., M.P.H., Ana Marusic, M.D., Ph.D., A. John P.M. Overbeke, M.D., Ph.D., Torben V. Schroeder, M.D., D.M.Sc., Hal C. Sox, M.D., and Martin B. Van Der Weyden, M.D.

N Engl J Med 2004; 351:1250-1251 | [September 16, 2004](#)

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Altruism and trust lie at the heart of research on human subjects. Altruistic individuals volunteer for research because they trust that their participation will contribute to improved health for others and that researchers will minimize risks to participants. In return for the altruism and trust that make clinical research possible, the research enterprise has an obligation to conduct research ethically and to report it honestly. Honest reporting begins with revealing the existence of all clinical studies, even those that reflect unfavorably on a research sponsor's product.

Unfortunately, selective reporting of trials does occur, and it distorts the body of evidence available for clinical decision-making. Researchers (and journal editors) are generally most enthusiastic about the publication of trials that show either a large effect of a new treatment (positive trials) or

# Defining the issue(s)

## Language Used

- Transparency
- Openness
- Access
- Dissemination
- Sharing
- Disclosure

## Information Sought

- Publications
- Data
- Grant information
- Conflicts of interest
- Clinical trial registration

# Motivations

- Accountability
- Anti-corruption / Interference
- Efficiency / Maximization of return
- Participation
- Trust

# Mertonian norms

- Communalism
- Universalism
- Disinterestedness
- Organized Scepticism

# Obstacles

- Inertia / Status quo bias
- Opposition from incumbents
- Tensions with other values
  - Intellectual monopoly rights
  - Scientific freedom
  - Priority claims & reward structures
  - Privacy / Human subjects protection
  - Security

# Federal policies

- Constitution
- Statutes
  - Appropriations riders
- Treaties
- Regulations
- Other international agreements
- Government-wide policies
- Department and agency policies
- Street-level bureaucracy

# Conclusion

- Future research
  - Effects of transparency
  - Comparative policy
- Future discourse
  - Public policies
  - Institutional policies
  - Scientific norms
  - Education and professional development

# Thank you!

- Slides available at [www.gavinbaker.com](http://www.gavinbaker.com)
- Please send feedback to [grb10@fsu.edu](mailto:grb10@fsu.edu)