

# Preprint Servers

Nature recently attacked rumours claiming that the journal did not respect authors' right to distribute preprints of their work on electronic servers [Nature respects preprint servers...despite false rumours to the contrary'. Nature Vol 434: 17 March 2005). Nature contended that their policy has always been that authors are free to publish their work on preprint servers as long as they inform Nature that this is the case.

The question of embargoes on prepublication has been a contentious one in the world of scientific publishing, splitting the major journals into two camps. While, like Nature, the Lancet accepts submission of pre-printed articles and encourages authors to create postprints of their work, both Science and JAMA refuses to publish papers that have been released in any form including on the web.

## What are preprint servers?

'Preprint' is in a sense a misnomer, as it usually refers to papers that have not yet been accepted for publication. An author can deposit their work in digital form. Many archives provide linking and indexing services. At present, many open access archives are run by institutions; pioneers included the British University of Southampton's server Daedalus. Some preprint servers are run by journals themselves: the BMJ sponsors the preprint server, Clinical Medicine Netprints, which is freely available for authors to post their work. Others, like Cyclades, are run by consortia of libraries

This debate is of course part of the wider issue of access to information online, with publishing companies' attempts to enforce barriers through subscription or pay-per-view charges pitted against those who advocate complete freedom of information and attack journals, in particular JAMA, for 'gagging' authors. The argument, of course, also involves publishers, who would lose out significantly from widespread free access to journals. Many suspect larger publishers of influencing the British government's negative re-

sponse last year to the report of the UK House of Commons Committee on Science and Technology which advocated an expansion of open access publishing.

The arguments over intellectual property tend to obscure the fundamental question for authors of whether posting work on the internet prior to publication is a beneficial exercise. Common worries for an author are that their work will be plagiarized before it has been accepted for publication or devalued by being posted on the internet, which many still consider to be full of 'junk science'.

## Do you know your AOP from your OA? A quick glossary of terms:

**AOP/ EOP - Advance (or Early) Online Publication:** The paper is published online by the journal after acceptance and peer review but before publication. Cell uses a slightly different process called Immediate Online Publication (see page 1).

**DOI - Digital Object Identifier** - a unique marker given to an electronic item such as a journal paper: these are becoming increasingly common.

**E-letter** - An online response to an article, these have been introduced by Science to provide more space for the discussion. Unlike standard message boards, e-letters are selected and edited to conform to Science standards.

**E-print** - An 'electronic print' is simply an online version of a paper, thus the term includes both pre- and post-prints.

**OA - Open Archive** This refers to a hosting service in which to publish papers (e-prints) online. they can be run by institutions, journals or other organizations. All papers are in the same format and a range of cross-referencing service are offered depending on the individual archive.

**Preprint** - A term referring to papers posted online that have not yet been accepted for publication.

**Postprint** - An electronic version of a final draft of a paper which has already been peer-reviewed and published.

**Self-archiving** - This is the process of an author publishing their own paper in a publicly accessible electronic form at any stage of the publication process.

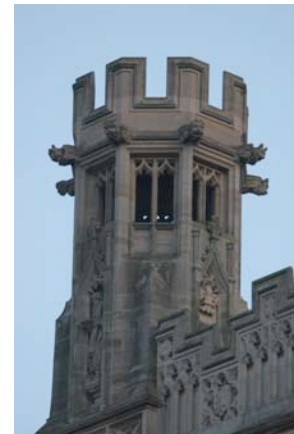
However, there are also many potential advantages to preprint publication. Perhaps the most obvious reason for posting a paper online is the potential for increased readership: surveys have shown

that internet articles in journals are more frequently accessed than their print counterpart. A survey published in Nature of the Impact Factors of computer science papers found that online articles were significantly better cited: whereas the mean number of citations to offline articles was 2.74, and the mean of those to online articles is 7.03, an increase of 157%. Online publication guarantees wider distribution than traditional journals and the Open Archives Initiative is now linked to PubMed, so that articles can be accessed before they are published.

Another advantage is the potential for feedback: the internet provides a more interactive medium for discussion. Many critics of the peer review system advocate 'open peer review': envisaged as an ongoing process in which peers can comment on one another's work and the author can respond. For many, this would seem an attractive alternative to the current peer review system, which is regarded by many as biased against foreign, female, or younger scientists, or those from less prestigious institutions. Electronic servers also offer innovative ways of linking between papers and grouping them by subject area rather than chronologically or by journal.

The use of electronic media opens up possibilities for the amount of data which may be expressed. In areas such as the mapping of genomes or micro-array analysis which generate vast amounts of data, it is often impossible to present the entirety in print form as it takes up too much space in the journal, or proves too expensive to reproduce, whereas in electronic publishing, this does not present a problem.

Some of the ideas behind preprint servers are becoming increasingly accepted within the scientific establishment. Lancet is currently experimenting with the idea of open peer review with its 'e-print' server,



ERA, on which articles which it is felt would benefit from more comment before publication are posted. Other journals, including Science, post supplementary data tables as an electronic appendage to print or online journals is now becoming common, especially in areas such as and in which access to complete data sets is essential. However, many of these ideas can also be incorporated after the traditional process of peer review, which many scientists still feel to be an important safeguard.

Pre-print servers provide important counterparts to traditional publishing and for an author, can increase their chances of publication in a quality journal but pre-print servers are still an issue of intense debate and it is essential to check with the journal(s) you aim to publish in whether or not they will accept pre-printed papers.

**To learn more visit:**

[The Open Archives Initiative](#)  
[Oxford University's Open Archive](#)  
[SPARC](#)

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To check which journals will accept papers that have been submitted to preprint servers and which will not, check the list at

<http://clinmed.netprints.org/misc/policies.shtml>

Please note that it is also advisable to check directly with the target journal before posting a paper online at any stage.

