RESEARCH REPOSITORIES: **PROMOTING RESEARCH AND ONLINE COLLABORATION**

What They Are

An 'online library' containing all of the academic papers and other research output produced by the host institution(s). As far as possible, the information is made freely available, permanently to everyone.

This is referred to as 'Open Access'. There are significant benefits to this approach.

We need them because:

They increase the Institutional research profiles

- Increase citation counts
- C Increase opportunities for collaboration
- They also make knowledge available to practical decision makers in society
- Can allow us to gather data on usage activity and research output
- Are becoming an essential for modern scholarly communication.

and, collaboration among the Institutes on this . . .

- Shared Infrastructure
- B Shared Knowledge
- Shared Innovation

will give us:

- Low Financial Cost
- **B** Outsourced IT
- C Unified approach to Implementation and Policy

Research Repositories: Promoting Research and Collaboration

Open Access Research

During the last 50 years or so, the flow of published research has swelled into a cataract. There are now more specialist journal titles than ever, and each has a smaller readership. This has made it impossible for even the largest university library to subscribe to all of the titles that their staff may wish for.

The advent of the web and electronic publishing has the potential to reverse this constricting trend on scholarly information flow. The Internet is already having a significant impact on the traditional paper-based academic publishing system.

The best overall answer is the 'Open Access' school of thought, which holds that all publicly funded research should be freely accessible. In other words, not locked behind subscription barriers or barriers of any kind.

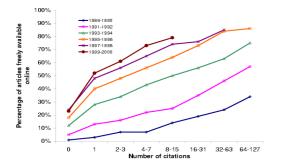
This goal of open access is being realised in two ways; first, there are now a number of free, exclusively online journals. Second, strange as it may seem, many authors in the established journals are allowed to publish their work freely on Institutional Research Repositories. This is what this poster presentation is about and there are some good reasons why we should be doing this.

'Citation Advantage'

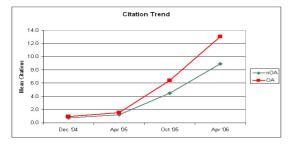
Authors of new research papers are presented with more choice. They will read papers to which they have free access, and will only pay for access to similar papers, if their information needs remain unmet.

There is abundant, well documented, evidence that open access papers are more cited than subscription access papers.

This graph, below, is from a landmark study on the subject of citation impact, (conducted in 2001). It shows how papers with higher citation counts achieved tended to be those who were more openly accessible on the web. The graph shows also that this trend became stronger over time, with the cohort from '99-'00 exhibiting this trend most strongly.



A direct comparison (2006) between non-open access and open access articles within the same journal shows this trait again. (Below)



The openly accessible papers (red) accumulated about 25% more citations over the 6 months following publication than did the 'closed access' papers.

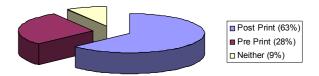
Open access is a compelling philosophy for researchers and university managers; both for its long-term good it will bring to society and for the more tangible gain conferred by the 'citation advantage' on authors' and research groups'.

Publishers & Copyright

Publishers have been remarkably accommodating, and many will allow authors to put electronic copies of their work on their own or their institution's web sites.

The Sherpa Romeo project is a JISC – funded initiative, which keeps a track of which journals allow what in terms of open access. This graph generated from their data shows the proportion of journals that will actually allow authors to put their items on their own institutional server or repository.

Proportion of Journals that allow Archiving on a Repository



Only a minority of journals retain restrictive policies in respect of adding 'archiving' material on open access repositories, and the figure is getting smaller all the time.

Authors typically hand over their copyright to the publisher when they submit their articles. (Intellectual property rights are retained.) The majority of journals who do let authors add their 'post-print' (final, corrected proofs) to a repository will only allow authors to add their own final proof instead of the publisher's branded, type-set PDF.

The Plan

Research repositories are effectively online 'libraries' of research output, made openly accessible to the entire Internet.

The idea is to co-host all the repositories in one server, with excellent data security and a level of technical support. We can do this very cost-effectively.

With this out of the way, individual institutes can focus on the real work, which consists of getting buy-in from their staff and making a start on populating their own repositories.

Working Group

A working group of representatives from each participating institution has been formed to share knowledge, undergo training and develop a consistent approach to developing this aspect of research infrastructure, which is also consistent with national and international developments.

Future Innovations

This is a fast-moving area. Information overload is a significant problem, for example. The 'Semantic' Web, the 'Social' Web and related technologies hold great promise for dealing with this problem by shortening the time it takes for researchers to both find information and evaluate what they find.

We are already doing some work with EPrints, Microsoft and Nature Publishing in these areas.

