

A response to “Scholarly Information in a Digital Age – Choices for the University of Melbourne”

John B Furness, Faculty of MDHS, 4 April 2008.

I welcome the “The Scholarly Information in a Digital Age – Choices for the University of Melbourne” document. It shows a University commitment to this area and the document itself is well researched. However, I am concerned that it does not appear to go far enough in dealing with the present and future needs in eResearch.

The Expert Panel looks expert in terms of library-type information and teaching, which are obviously very important, but it seems light on researchers, and on people who might interface with NCRIS Platforms for Collaboration, VPAC, VeRSI, The Australian eResearch Infrastructure Council and similar groups. In particular, there is lack of Biological/ Bioscience expertise. As Rhys Francis has pointed out, the greatest demands for eResearch are in biological systems. I believe that it is important that eResearch is strongly integrated in the information futures agenda.

The section of the document on Research concentrates on access to scholarly information and the improvement of research ranking by publishing in internet accessible ways. The latter includes a “commitment to online repositories to give greater access and profile to the University’s scholarship”. This is laudable, but for most scientists, the publicly available systems (PubMed, for example), serve our needs well. Maybe other aspects of eResearch could be considered equally important priorities.

There is no explicit discussion of Melbourne University taking a lead in creating national databases, or of strategies and infrastructure for University researchers to archive their data, and to share archived data. This requires secure, non-corruptible, long-term, user accessible archiving. It would also be feasible to have IT support for other research-related functions, such as research protocols, experiment design databases, equipment and research platform access protocols. Maybe we could do away with, or at least partly replace lab books as research records. The University policy on research records (<http://www.unimelb.edu.au/records/research.html>) implies that there should be ways to properly archive electronic data, including electronic images. Some of this information is in the Gb to Tb range.

I want to comment specifically on this one aspect, the needs of researchers who collect and need to share large data sets.

I am part (a member of the National management committee) of the Australian Phenomics Network (APN), an NCRIS funded enterprise, that is intended to facilitate the use by Australian Scientists of data on mouse models of disease. These mouse models are generated by targeted and random mutation of their genes. This type of research is at the very forefront of medical and biological research.

When I came to look into the resources that the University has to support the generation, archiving, security and interrogation of large data bases I felt that the systems in place did not meet my needs. To support what I do, which I am confident contributes to the University’s national and international profile, I need to have secure, reliable, high capacity connection to a super-computer repository. I have been offered access to the SOMA computer, but there is not even a 1 Gb connection between the medical building and Electrical Engineering. I need to archive images and associated meta-data, and to make the images available through the web to users throughout Australia. I also need expert advice on setting up the service. I have received some assistance, but it seems to me that the University does not yet have a co-ordinated approach to eResearch. I would like to see the Commission investigating whether more resources are needed for eResearch, or a better organisation, or both.