Open access and the Wellcome Trust

Second digital repositories meeting, Berlin 4, Golm 29 March 2006

Robert Terry, Senior Policy Adviser

r.terry@wellcome.ac.uk



One of the world's largest medical research charities

Expenditure in 2004/05 of c £480 million

Supports more than 3,000 researchers at 400 locations in 42 different countries





Funding major initiatives in public engagement with science and SciArt projects

The UK's leading supporter of research into the History of Medicine

Open access at Wellcome: policy

- From October 1 2005, it became a condition of funding that a copy of any <u>original research paper</u> published in a peerreviewed journal must be deposited into PubMed Central (PMC).
 - First funding body to mandate this
 - Books, conference proceedings, editorials, reviews are NOT covered by this policy
- Existing grant holder's are "strongly encouraged" to deposit.
- From October 1 2006, the condition to deposit in PMC will become mandatory to all grant holders, irrespective of award date (NB. This applies to <u>new</u> papers from this point forward)



Open access at Wellcome: policy

- The Trust provides <u>additional</u> funding to cover the costs relating to article-processing charges levied by publishers who support this model.
- Approximately 1% of the research grant budget would cover costs of open access publishing
 - Block awards to top 30 universities
 - Supplement grants
 - Contingency element within the grant
- New open access publishing choices by article
 - OUP, Springer, Blackwell
- RoMEO survey of <u>journal</u> policies on archiving



Portable PubMed Central – UK PMC

To develop a PubMed Central portal in the UK that will create a stable, permanent digital archive of peer-reviewed biomedical research publications* that is accessible for free via the Internet.

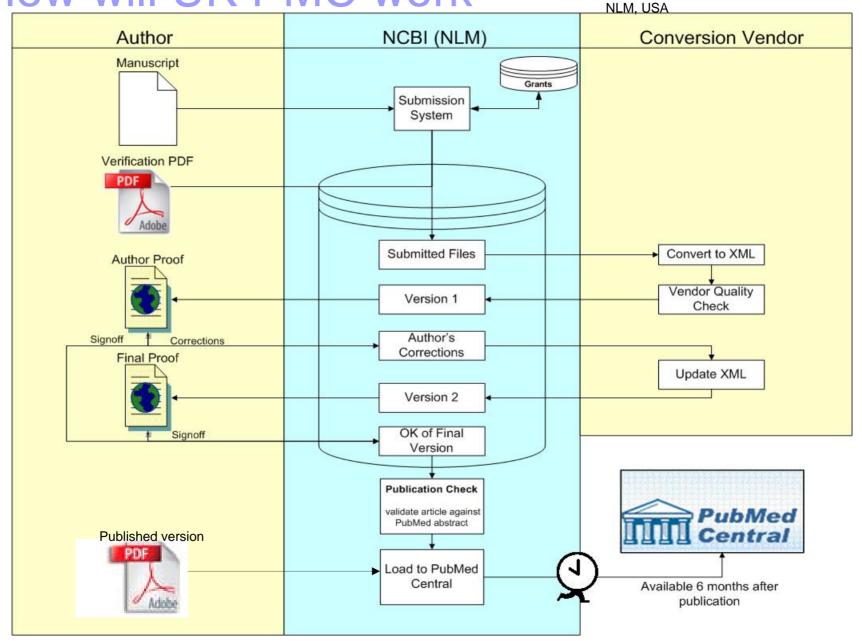
*Dept. of Health, MRC, BBSRC, JISC, Cancer Research – UK, British Heart Foundation, Arthritis Research Campaign, Wellcome Trust, AMRC.

Mirror the data from USA, Japan, France... collaboration and competition.



How will UK PMC work

Source: David Lipman, Director, National Centre for Biotechnology Information,



Why PMC (UKPMC) and not IR's?

- Long-term preservation
 - All articles in PMC are marked-up in XML future-proofing the record of medicine – global solution – ease of use <3minutes to deposit – publishers deposit final published version
- Accessible under "one roof"
 - PubMed is the default search tool for biomedical researchers
 - All PMC articles linked to the PubMed citation seamless searching
 - Example (using live hyperlinks) <u>Pubmed</u> & <u>Google</u>
- Evaluation purposes
 - Funder attribution: <u>WT papers in PubMed</u> <u>WT papers in PMC</u>



UKPMC – quality, consistency, integrate data & literature

There are three types of errors that PubMed Central deal with:

- 1. Structural Errors do not conform to the ruleset (DTD) that they were written for e.g. XML tags are wrong: <surname>Jones</snm>
- 2. Content Errors formula, tables, paragraphs, special characters (Greek characters or symbols) are not correct.
- 3. Consistency Errors tagged in one style suddenly switches e.g. For the first 5 years of content, Journal X has been tagging dates like: <date>10-12-2004</date> (m-d-y)

Then, this date appears in content: <date>14-12-2004</date> (this must be d-m-y)

4. Integrate the literature with the data



Data management and sharing policies

A number of funding agencies (NIH, MRC, NERC) make it a requirement of funding that researchers develop a data management plan which will include a plan to enable the sharing of the data.

The Trust is developing a policy and considers that it is good research practice for researchers to plan how they will manage the data generated during research. How data will be shared (or not) should be a key element of a data management plan.

The role of funders and the peer review system will be to:

 review these data management and sharing plans, including any costs involved in delivering them, as an integral part of the funding decision.



A data management plan: issues to consider

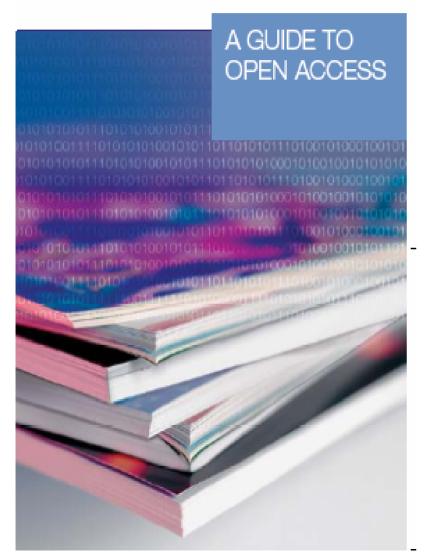
- Timing of data sharing
- Use of public data repositories
- Recognising the interests of the researchers who generate data
- Intellectual property
- Ethical issues for research involving human participants
- Data quality, standards and integration
- Long term preservation and sustainability of data resources

What should funders do?

- Clear policy to <u>mandate</u> their researchers to deposit their papers
- Clear policy to provide the funding for open access publishing – make them part of <u>research</u> costs
- Support and/or create <u>repositories</u> provide clear advice to researchers and provide it again.
- Talk to publishers
- Open access data integration

http://www.wellcome.ac.uk/openaccess

we cometrust



Appendix showing:

screen grabs of PubMed Central; and the Trust's recommendation on copyright transfer

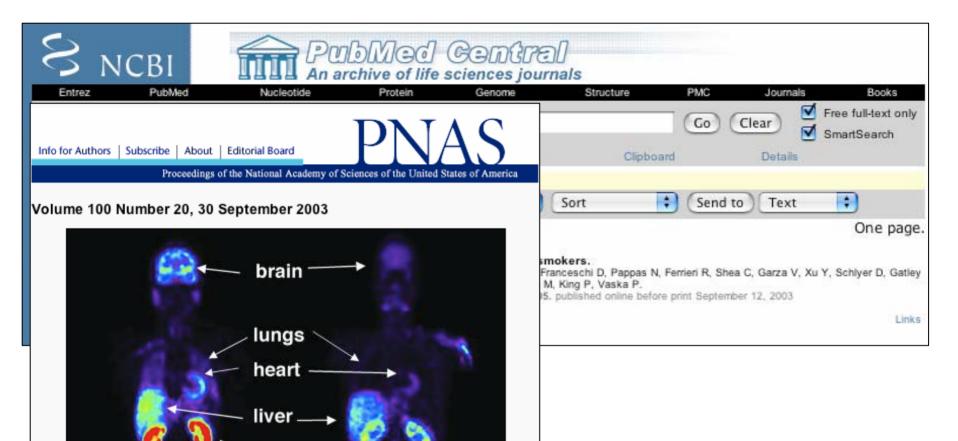


Fig 2.

Whole-body images of carbon-11 distribution in one of the nonsmokers and one of the smokers. These subjects were scanned with L-[\$^{11}\$C]deprenyl, and scanning was started at 25-min post-radiotracer injection. Red is the highest radiotracer concentration on the color scale, and images are scaled so that they can be compared directly.

kidneyś

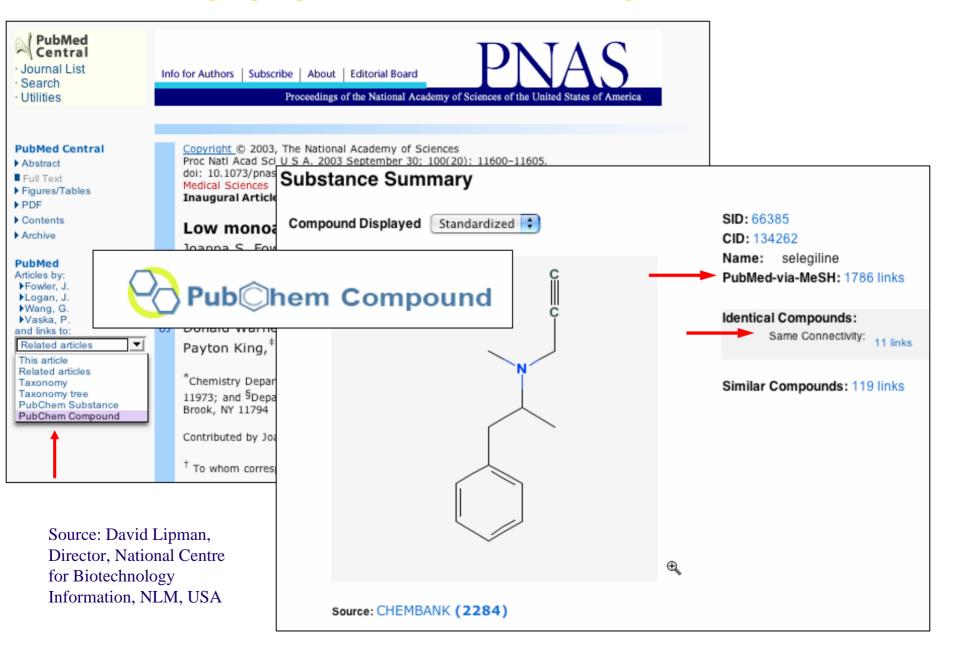
Smoker

Non-smoker

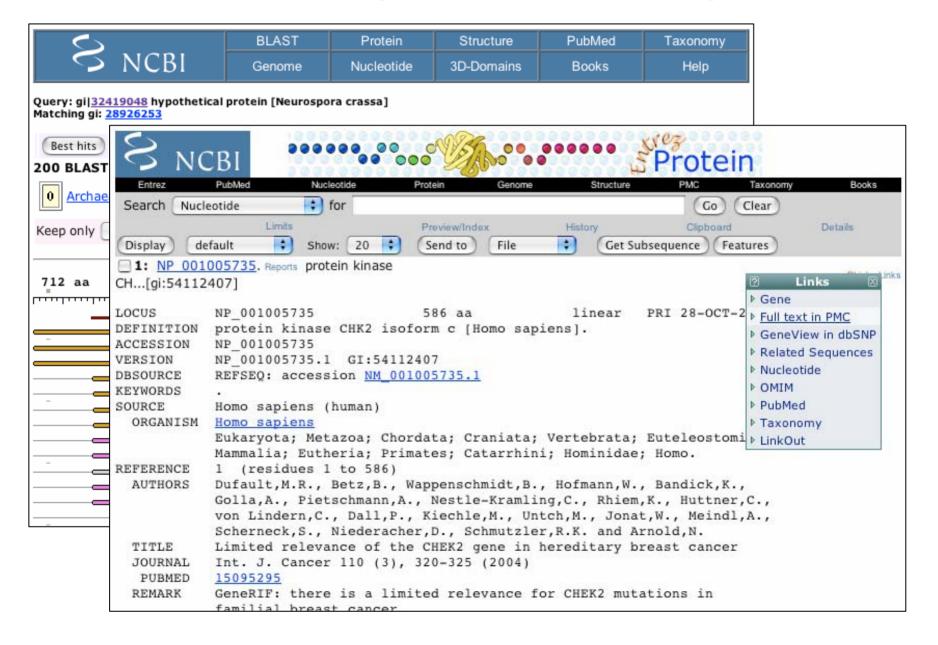
Source: David Lipman, Director, National Centre for Biotechnology Information, NLM, USA

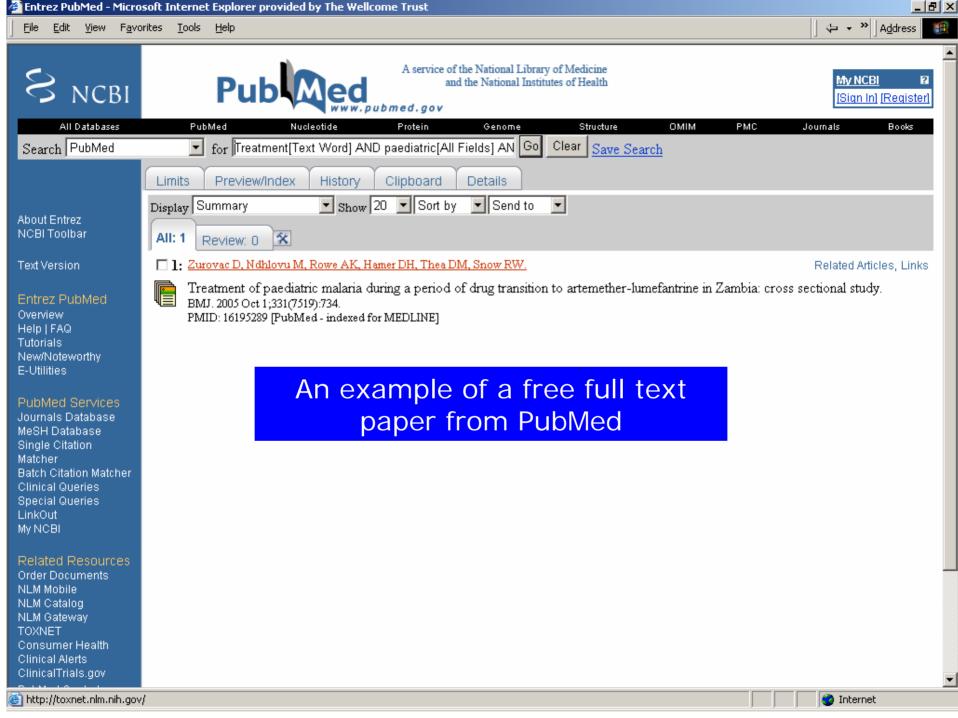


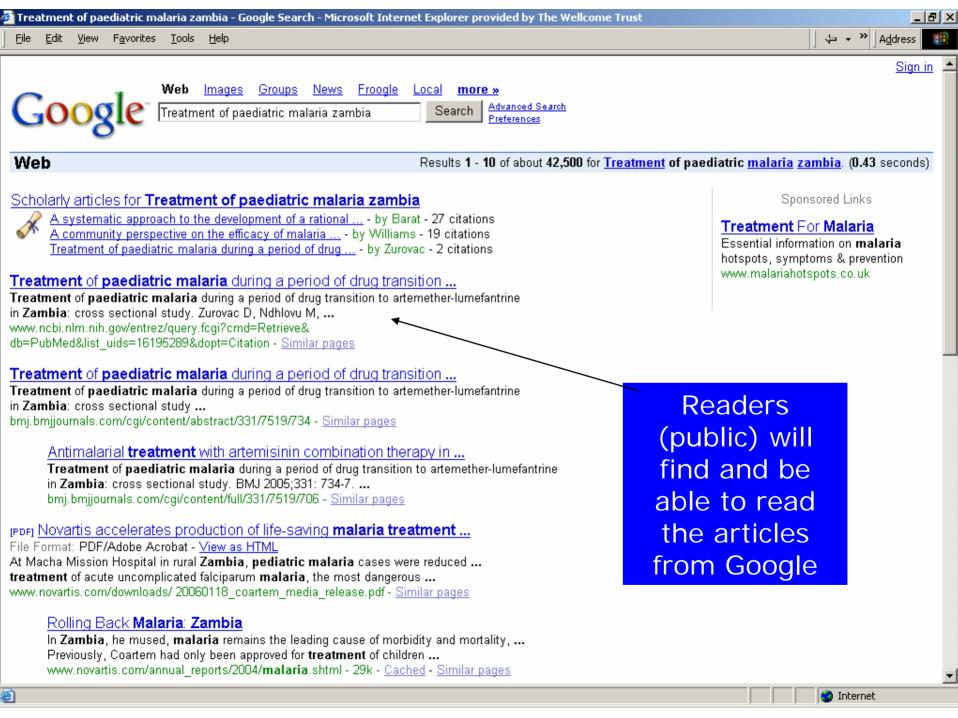
Link to imaging agent in PubChem through MeSH



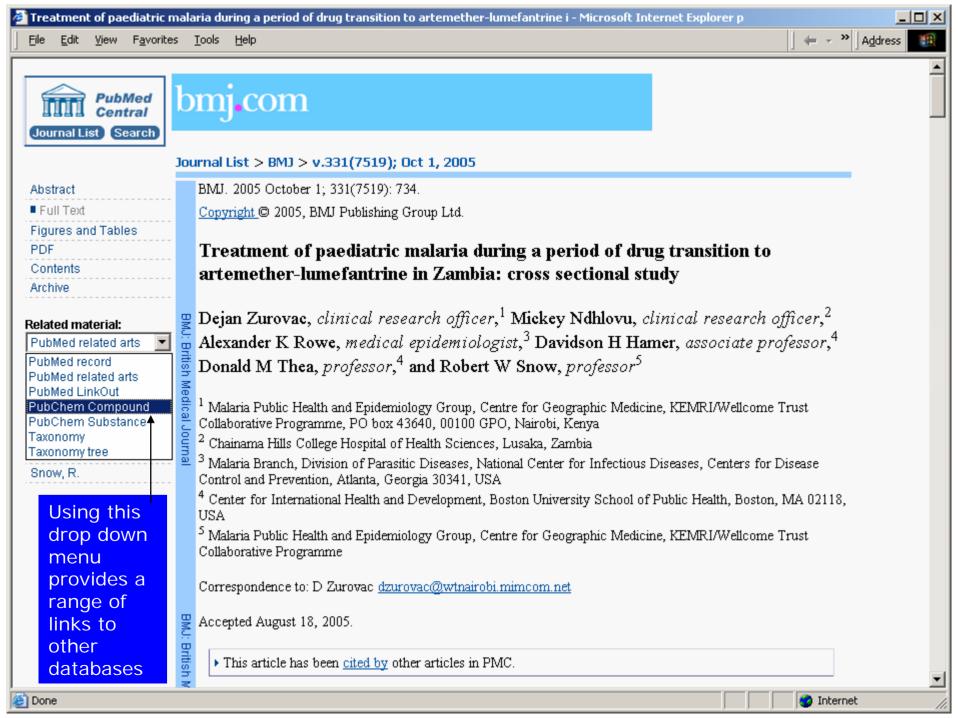
Links between sequence and related proteins

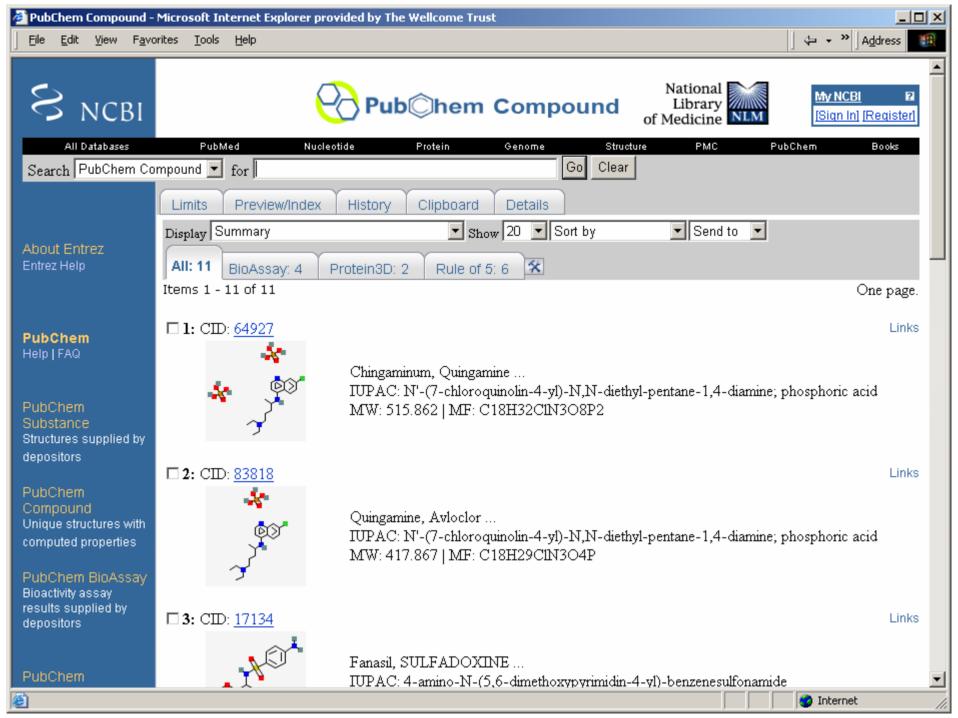


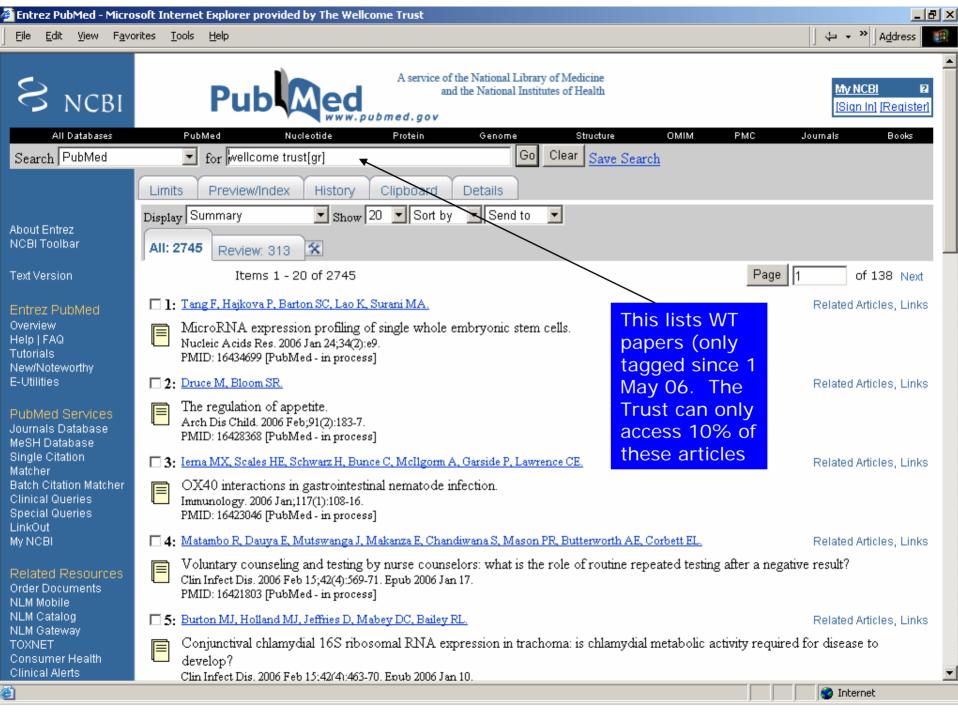












Trust copyright amendment

 Notwithstanding any of the other provisions of this agreement, the journal acknowledges that the researcher will be entitled to deposit an electronic copy of the final, peer-reviewed manuscript into PubMed Central (PMC) (or UK PubMed Central (UKPMC) once established). Manuscripts deposited with PMC (or UKPMC) may be made freely available to the public, via the Internet, within 6 months of the official date of final publication in the journal.