

## Rationale

As you know from the Grant Conditions, all grant holders are required to submit a report at the end of their period of funding. The End of Grant Report Form is an opportunity for you to share details of the achievements and implications of the research that the Wellcome Trust has supported. The information contained in the report is of great value as it allows us to assess and review the outputs and outcomes of the research that we fund. This critical information enables the Trust to ensure that research has been carried out in accordance with our charitable objectives and is a vital input to future planning and strategy setting.

## Completing the form

**We would be grateful if you could complete this form electronically in Word, save it and return it as an e-mail attachment to:** [endofgrantforms@wellcome.ac.uk](mailto:endofgrantforms@wellcome.ac.uk)

- To insert text in the answer fields, simply left-click in the grey areas and type. The answer grids will extend automatically as you type.
- To select check boxes, left-click in the box. Left-clicking the box a second time will deselect that option. The space bar will also select and deselect check box options.
- In addition, the tab and shift + tab keys can be used to move between answer fields and the space bar to delete highlighted text.

The report form is divided into two sections:

In **Section A** you are asked to record key research achievements, implications and outputs. This section of the form may be sent to external assessors for comments.

In **Section B** you are asked to provide further information for office use only.

## Conditions

The End of Grant Report Form **must be submitted within three months of the grant end date**. Failure to submit a report may cause the final payment to be delayed, and / or may cause the Trust to refuse to consider further grant requests.

**Section A** of the End of Grant Report Form may be presented as an annex to any future applications you make to the Trust.

## Contact us

If you have any general questions or comments about the completion of this form then please call: (0)20 7611 8748 or email us at: [endofgrantforms@wellcome.ac.uk](mailto:endofgrantforms@wellcome.ac.uk).

**SECTION A**

<b>Wellcome Trust Grant Number</b>	075847
<b>Name of Grant Holder</b>	National Library of Medicine
<b>Project Title</b>	Medical Journals Backfiles Digitisation Project
<b>Type of Grant</b>	

**OVERVIEW**

**What was the overall aim of the work supported by this grant?** (no more than 150 words)

The purpose of the project is to make key medical journals freely available to the public in electronic form on the National Library of Medicine's PubMed Central (PMC) database. PMC is an existing online archive of life sciences journals established by NLM at the National Institutes of Health (NIH).

Under the terms of this grant, NLM, the Wellcome Trust, and the JISC agreed to cooperate and expand the content of PMC for the benefit of the international biomedical community and the general public.

The Wellcome Trust and the Digitisation Project Board worked with NLM in identifying additional medical journals to participate in PMC and to supply disposable archives of their print backfiles for the digitisation. The grant funds supported NLM's digitisation efforts, quality assurance, some shipping and handling charges, and archiving functions.

**What have you discovered / achieved?** (no more than 350 words)

As a result of the collaborative project between the Wellcome Trust, the Joint Information Systems Committee (JISC), and the US National Library of Medicine (NLM), the entire archive of a number of historically significant medical journals are now freely available on PubMed Central. All participating journals are also regularly depositing current content in an electronic format compatible with PMC.

The archives include:

The Biochemical Journal 1906-  
Annals of Surgery 1885-  
BMJ 1857 - (digitisation still ongoing)  
British Journal of General practice 1952-  
Journal of Anatomy 1866-  
Medical History 1952-  
Proceedings of the Royal Society of Medicine, 1907-, and others.

In total around 20 journals will be digitised by the end of the project - comprising well over 2 million pages of text.

One of the outstanding features of PMC is that all tables of contents and article pages are created dynamically – there are no static HTML pages – thus ensuring that if there are problems with the archive these become self-evident and will get reported to the NLM.

Other important value-added features include:

- Separate, high resolution images for all illustrations
- Links from the PMC article to its bibliographic citation in PubMed and vice versa
- Links from the references in the bibliography to the citation in PubMed
- Links from the references in the bibliography to the free full-text in PMC where available or to full text at a journal publisher's site
- Links from the original article to corrections and retractions and vice versa
- Links to PubMed related articles
- Links to PubMed articles by each author
- Links to other articles in PMC which have cited the viewed article ("cited by" links)
- Links to related resources – such as chemical compounds and protein sequences

**What are the implications of this work? Please include details of anticipated outputs and outcomes, policy implications and changes in healthcare practice, with timelines. (no more than 350 words)**

One clear implication is that users of PubMed are accessing articles on the PMC website at an enormous rate in every journal that has been archived. Making information free and readily accessible provides a great advantage to researchers, historians and others. This archive will live in perpetuity. All deposited materials will remain permanently in this archive, and it is much more likely that material will be read than if it was left in printed form, or digitized for a pay-per-view archive.

In the month of September 2007, over 10 million documents were retrieved from PMC by over 2.9 million unique users. Statistics for each journal reveal elevated usage for every month they are available. Cited below are some statistics from September for titles added to PMC through this grant:

Medical History - 54,787 hits to 6,555 unique articles  
Journal of Physiology - 165,944 hits to 17,598 unique articles  
Annals of Surgery - 347,747 hits to 18,610 unique articles  
Biochemical Journal - 394,342 hits to 54,011 unique articles

**Please provide a lay summary of the discoveries, achievements and implications of this work (if this has not been provided above in lay terms). (no more than 350 words)**

*Please note that we may wish to extract this text for publication on our website or release it into the public domain.*

See above.

**Have any other funding bodies been involved in supporting the development of the work supported by this grant?**

Yes  No

*If yes, please give details (no more than 150 words)*

As explained above, The JISC, the Wellcome Trust, and the National Library of Medicine have all contributed funds to support this project.

Did the grant terminate prematurely?  Yes  No

If yes, please explain why (no more than 150 words)

**DISSEMINATION**

Please provide details of how the results of the **work supported by this grant** have been disseminated to both the scientific and wider community.

Publications		
Please tell us how many accepted (in press/published) original peer-reviewed publications (research papers/books/monographs) have resulted directly from your work supported by this grant to date.		
	Research papers	Books/Monographs
Total number of publications	N/A	N/A

Please list up to ten key accepted (in press/published) original peer-reviewed publications (research papers/books/monographs) resulting from your work supported by this grant to date.						
Title	Journal	Year	Volume (if known)	Page no. (if known)	Authors	UKPMC ID No. For guidance please refer to the Trust's policy at <a href="http://www.wellcome.ac.uk/doc_WTD002766.html">http://www.wellcome.ac.uk/doc_WTD002766.html</a>

<b>Research resources/Intellectual property</b>	
<b>Please tell us if any research resources development/intellectual property activity has resulted directly from the research funded through this grant to date. Please tick those that apply.</b>	
Software/database development	<input type="checkbox"/>
Patents filed	<input type="checkbox"/>
Product licenses	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>
<b>Please tell us in more detail about any intellectual property activity or research resources developed, and briefly summarise how the data or resource resulting from the research was managed and shared with other researchers. (no more than 350 words)</b>	
This project has made available to the research community the entire archive of around 20 historically significant journals - over 2million pages of text. This archive is freely available on the web - no registration to use the archive is required.	

<b>Communication/public engagement activities</b>	
<b>Please tell us if you have carried out any communication/public engagement activities with the research/research outcomes associated with this grant to date. Please tick those that apply.</b>	
Academic workshop/conference presentations	<input checked="" type="checkbox"/>
Presentations to non-academic audiences (including schools)	<input checked="" type="checkbox"/>
Feedback to research participants and related communities	<input type="checkbox"/>
Meetings or discussions with policy makers/healthcare professionals	<input type="checkbox"/>
Media coverage	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>
<b>Please tell us in more detail about these communication/public engagement activities. (no more than 250 words)</b>	
<p>The project has been presented at various workshops and conferences, including the UK Serials Group Conference (see: <a href="http://www.uksg.org/sites/uksg.org/files/imported/presentations8/kiley.ppt">http://www.uksg.org/sites/uksg.org/files/imported/presentations8/kiley.ppt</a>) and the JISC Annual conference <a href="http://www.jisc.ac.uk/uploaded_documents/Digitisation%20-%20Stuart%20Dempster.ppt">http://www.jisc.ac.uk/uploaded_documents/Digitisation%20-%20Stuart%20Dempster.ppt</a></p> <p>It has also received extensive media coverage, including the BMJ, Nature, Guardian, as well as "advertorials" in the various digitised journals as they come online. For details see the press pages at the Backfiles Web site at: <a href="http://library.wellcome.ac.uk/doc_wtx017073.html">http://library.wellcome.ac.uk/doc_wtx017073.html</a></p> <p>The National Library of Medicine ofrequently references the cooperative agreement with the Wellcome Trust and JISC in describing the development of the PMC database and back isse digitisation project to internal staff, to external visitors, and at annual conferences, such as the Medical Library Association Meeting. The product is uniformly well-received and lauded by all who use it.</p> <p>Finally, in a review of digitisation initiatives in the UK, the Backfiles Projects was singled out as an examplar of collaborative working. See: <a href="http://www.jisc.ac.uk/whatwedo/programmes/programme_digitisation/reports.aspx">http://www.jisc.ac.uk/whatwedo/programmes/programme_digitisation/reports.aspx</a></p>	

<b>Collaborations</b>	
<b>Please tell us if research supported by this grant to date has resulted in any of the following types of collaboration. Please tick those that apply.</b>	
Collaborations with commercial partners	<input type="checkbox"/>
Collaborations with academic groups outside of this award	<input type="checkbox"/>
Other	<input type="checkbox"/>

**Please tell us in more detail about these collaborations. (no more than 250 words)**

N/A

## RESEARCH STAFF AND TRAINING

Please list the name and details of all staff in receipt of a salary or stipend from this grant (including fellows, students, research assistants and technicians as appropriate). Please also give details about yourself in the space provided.

Data on date of birth and sex is collected in order to help inform the Trust's equal opportunities monitoring policies. All information collected is confidential and will be reported in aggregate only.

Please complete all relevant fields for each individual.

			Post held on this grant			Current post		PhD*	
	Sex M/F	Date of birth	Job title	Start date	End date	Job title	Location	Start date	Date of submission
<b>Your name</b>									
<b>Names of staff</b>									

\*if PhD studies were supported by this grant

**Please summarise the number of staff, in the categories set out below, who were in receipt of a salary or stipend from this grant (including yourself).**

Job title of staff	Full-time	Temporary/ part-time
Principal Fellows / Senior Fellows / Professors / Readers / Senior Lecturers or equivalent		
Intermediate Fellows / Senior post-docs / Lecturers or equivalent		
Junior Fellows / Junior post-docs or equivalent		
PhD Students / post-graduates or equivalent		
Technicians		
Other research staff (eg. social scientists, statisticians, health economists, epidemiologists)		
Other Administrative & Support Staff		

**How has the grant contributed to the professional development of the staff named above (including yourself)?**

(no more than 250 words)

N/A

**Please give details of how this grant has contributed to any training that has been provided to others (e.g. visiting fellows/researchers).**

(no more than 250 words)

N/A

**Please tell us if you, or any of the staff described above, have received any prizes, awards or commendations, as a direct result of the research supported by this grant to date. Please give details, including the name of the recipient, below.**

N/A

## SECTION B

### ANIMAL USAGE

Were any animals used in this research?

Yes

No

*If yes, please complete the details below. If no, please skip to the additional feedback section:*

Species of animal	Number used

**Please detail how the principle of the “3 Rs” (reduction, replacement and refinement) has been applied to the animal experimentation conducted during this research. (no more than 150 words)**

## ADDITIONAL FEEDBACK

**Do you have any comments you would like to make regarding this Trust award, the conduct of this research, or any difficulties you have encountered?**

The National Library of Medicine's interaction with the JISC and the Wellcome Trust grant has been a completely positive and rewarding experience.

We have very much enjoyed working with Robert Kiley at the Wellcome Trust, Stuart Dempster and now Paola Marchionni at the JISC and others. Communications are clear, face to face meetings have been fruitful, and the success of the project is due in large part to the aggressive work by Robert Kiley in contacting publishers and setting up the agreements to deposit their journals in PubMed Central.

The resulting expansion of journals contributing to PubMed Central through the efforts of this grant is of great value to the many researchers accessing that database.

***Thank you for taking the time to complete this form. Please email your completed form to [endofgrantforms@wellcome.ac.uk](mailto:endofgrantforms@wellcome.ac.uk)***