Acknowledgement of Funders in Scholarly Journal Articles

Guidance for UK Research Funders, Authors and Publishers

February 2008



The Issue and the Aim of this Guidance

- Most of the major research funders in the UK, including the Research Councils and the Wellcome Trust, currently include in their terms and conditions of award to grant-holders a requirement for researchers to acknowledge in any publication the support received from the funder in question. But there is no standard wording, or guidance on the form the acknowledgement should take.
- Similarly, many publishers include provision in their XML for the acknowledgment of funders; but again there is no standard format, and no consistency in tagging of the information provided by authors.
- 3. The result is that it is difficult for funders to discover what publications have arisen from the research they have funded, and for publishers to provide relevant information to readers in a consistent way. This Guidance Note aims to remedy those deficiencies and to enable both funders and publishers to link journal articles to specific funders and specific research grants.
- 4. The Guidance results from discussions between the Research Information Network (RIN), the Wellcome Trust, the Natural Environment Research Council (NERC representing all the UK Research Councils), Wiley-Blackwell and CrossRef. We have not sought to tackle all the issues that may arise in seeking, for instance, to establish linkages between publications and funders' databases of grants. Rather, we have adopted a pragmatic approach, and we seek through this Guidance to provide a simple way of ensuring that published journal articles are, wherever possible and appropriate, accompanied by standardized, high-quality metadata providing information about the organizations that funded the research.
- 5. The Guidance has been endorsed by the Research Councils, the Wellcome Trust, and the Association of Medical Research Charities, as well as by the Publishers Association and the Association of Learned and Professional Society Publishers.

Benefits

- 6. The benefits that will arise from adoption of this Guidance will accrue to researchers, research funders, and publishers. All will benefit from the adoption of consistent advice from funders to researchers, and the provision of consistent information from researchers to publishers and to the readers of articles.
 - Researchers will benefit from clear guidance and a standard format for meeting funders' requirements to acknowledge the funding support they have received; and as readers they will benefit from greater transparency about the work reported on in journal articles.
 - Research Funders will see an increase in compliance with their requirement for acknowledgement, and will thus be able more easily to monitor and evaluate the outputs from specific grants and programmes.
 - Publishers will enhance their relationships and improve the information services they
 provide to funders, authors and readers. In following this Guidance they will be able to
 - i. provide relevant information to readers
 - ii. help ensure transparency in the published research outputs
 - iii. facilitate the development of relationships with funders
 - iv. provide a source of management information on the source of published articles
 - v. enhance published articles by facilitating links to more detailed grant information.

Funders' Guidance to Researchers

7. As noted above, all major research funders make it a condition of grant that their support should be acknowledged in any resulting publication. We **recommend** that when funders next amend their terms and conditions of grant they specify that all published research articles should have a funding acknowledgement in the form of a sentence as follows, with the funding agency written out in full, followed by the grant number in square brackets:

This work was supported by the Medical Research Council [grant number xxxx].

8. Multiple grant numbers should be separated by comma and space. Where the research was supported by more than one agency, the different agencies should be separated by semi-colon, with "and" before the final funder. Thus:

This work was supported by the Wellcome Trust [grant numbers xxxx, yyyy]; the Natural Environment Research Council [grant number zzzz]; and the Economic and Social Research Council [grant number aaaa].

9. We **recommend** that funders should also make clear that **all** authors listed in a research publication should provide the relevant grant information to the corresponding author; and that it is the responsibility of the corresponding author to provide that information to the publisher in the format specified above.

Repositories

- 10. We recognize that many researchers are depositing their publications either as pre-prints or as accepted manuscripts in institutional or subject-based repositories. Our aim of ensuring that journal articles are accompanied by standardized high-quality information about the organizations that funded the research applies irrespective of the version of the publication, and where it is located. We therefore **recommend** that funders should also make clear to researchers that they should provide information in the format set out in paragraphs 6 and 7 when they deposit articles in any repository.
- 11. We further **recommend** that repository managers should ensure that their deposit procedures include a check that depositors have provided funding information in the format set out in paragraphs 6 and 7.

Guidance for Publishers

12. Publishers will vary in the extent to which, if at all, they seek to chase up or to validate the information provided by corresponding authors; but the provision of a standard format for acknowledgement recommended by major UK research funders will facilitate

- checking. And in order to help copy-editors to achieve consistency, the RIN will make available through its website a list of the correct titles of the major UK research funders.
- 13. In some cases, research is not funded by a specific project grant, but rather from the block grant and other resources available to a university, college, or other research institution. Where no specific funding has been provided for the research, we recommend that corresponding authors should be asked to use the following sentence:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

- 14. We make recommendations below on good practice in tagging of the information provided by authors. Our aim is that such information should be made available freely and as widely as possible. But it is for individual publishers to consider, once they have tagged and formatted the text provided by authors, whether they will distribute it to third parties (including funders) free of charge or included within an open access fee; or sell it as metadata to aggregated services (such as A&I companies); or expose it for metadata harvesters to collect; or any other business model that reflects their investment in managing the metadata and customer requirements.
- 15. Our **recommendations** on good practice in tagging are at three levels, from the basic to the more advanced:
 - Consistent tagging of funders and grant numbers using journal- or publisherspecific tags;
 - ii. The use of industry-standard tags;
 - iii. The provision of funding information in a specific "Funding" section in an article.
- 16. We **recommend** that all publishers should adopt at least Level 1.; and where possible and appropriate they should move to Levels 2 or 3.

Level 1: Journal- or Publisher-Specific Tags

17. At this level, we **recommend** as a basic requirement that individual publishers should adopt a standard and consistent tagging format for each journal or, preferably, across all their journals. Sample XML from Wiley is provided at **Annex A**.

Level 2: Industry-standard Tags

- In pursuit of our aim of consistency and standardization, there would be clear benefits from the adoption of industry-standard tagging. Therefore at this second level, we **recommend** the adoption of the National Library of Medicine (NLM) DTD. Version 2.3 (http://dtd.nlm.nih.gov/index.html) includes initial support for tagging grant funders and grant numbers and this can be adopted by publishers who have not already developed support for this in their own DTDs. The NLM tags are: <grant-num> and <grant-sponsor>. Sample XML from the NLM's current DTD is provided in **Annex A**.
- 19. The NLM is still developing its DTD and has stated that a more structured model for grant material and sponsorship is anticipated in a future release.

Level 3: Separate Funding Section

- 20. In pursuit of our aim of facilitating the linking of publications to specific funders and grants, and transparency for all readers of scholarly journals, there would be benefits if a clearly-identified funding section were to be incorporated into journal articles. We **recommend**, therefore, that articles should include a section, called "Funding", which would include information that has previously been in the Acknowledgements section or in footnotes. The information should be in the format set out in paragraphs 6 and 7 above.
- 21. We recognize that making this change is not trivial, but it could be accomplished in a phased manner and rolled out across different journals. Instructions to Authors will need to be updated to get authors to include this section in articles as standard, and publishers' production processes will need to be adapted as well. But these changes will achieve a significant enhancement to the transparency of journal articles. Sample XML from OUP, which is introducing such a section into its journal articles, is provided at **Annex A**.

Implementation

- We recognize that adoption and implementation of our recommendations will take place over an extended period, as funders amend their terms and conditions of award, and publishers amend their DTDs.
- We also recognize that while both research and publication are international in scope, our recommendations are targeted at researchers and research supported by UK funders. Nevertheless, we believe that adoption of our recommendations by the major research funders in the UK, and by major journal publishers, will develop its own momentum. And we hope that our recommendations can serve as a guide for researchers, funders and publishers not only in the UK, but internationally. Those involved in UK PubMed Central have expressed interest in our work, and this promises to help speed implementation.
- 24. We shall reconvene as a working group in a year's time to review progress.

February 2008

Annex A: Sample XML

Level 1

From the Wiley Journal Article DTD:

Level 2

From the NLM DTD 2.3:

```
<fn id="ack2" fn-type="financial-disclosure">
<bold>Funding.</bold> This work was supported by the
<grant-sponsor>United States Department of Energy</grant-sponsor>
Office of Science (BER) grant number <grant-num>DE-FG02-04ER63803</grant-num>, <grant-sponsor> National Science Foundation</grant-sponsor>
FIBR Award <grant-num>EF-0425719</grant-num></fn>
```

Level 3

From OUP

The Funding section should be tagged as the last section within <body>.

```
<body>
...
<sec>
<title>Funding</title>
This work was supported by the <grant-sponsor
xlink:href="http://www.grf.org" id="GS1">Generic Research
Foundation</grant-sponsor>, the <grant-sponsor
xlink:href="http://www.energy.gov" id="GS2">Department of Energy</grant-sponsor> Office of Science grant number <grant-num rid="GS2">DE-FG02-04ER63803</grant-num>, and the <grant-sponsor
xlink:href="http://www.nih.gov" id="GS3">National Institutes of
Health</grant-sponsor>.

</sec>
</body>
```