

THIS WEEK

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Gold on hold

The move towards providing full open access to research papers was undermined last week, but should prevail in the long term.

A US announcement on open access was eagerly awaited. But when it came last week, the new policy was a blow for anyone who wants fully paid-for, immediate access to the results of publicly funded research.

The US Office of Science and Technology Policy has asked federal agencies to prepare plans to ensure that all articles and data produced from research that they fund are made publicly accessible within 12 months of publication (see page 414). That delayed-access approach would have looked progressive five years ago, when the US National Institutes of Health was first putting into practice its mandate that (at least) the authors' final versions of papers must be freely available within a maximum of a year of publishing — a 'green' open-access approach, with which this publication has consistently complied. But in 2013, it looks as if a combination of financial constraints and a lack of firm resolve at the top of the US government is blocking movement towards the policy that ultimately benefits science the most: 'gold' open access, in which the published article is immediately freely available, paid for by a processing charge rather than by readers' subscriptions.

The US decision adds risk to a bolder approach taken by the United Kingdom. A policy set by Research Councils UK, an umbrella body for seven national funding agencies, has committed the research councils to using some 1% of their government-provided funds to pay for a proportion of the research that they fund to be 'gold'. This policy, set to come into effect from 1 April this year, acknowledges that publishers add value to the published versions of research, and that this value should be paid for explicitly. A gold approach is the only one that seems likely to do justice to the promise of digital science (see *Nature* **481**, 409; 2012), in which online papers are linked seamlessly to data sets, software and analysis tools, and in which papers are published under a liberal licence that enables their easy re-use for applications such as text-mining. (That vision is also expressed in the Fair Access to Science and Technology Research (FASTR) bill that was introduced to the US Congress two weeks ago — but with the caveat of a six-month delay on open access after publication and without the assurance that publishers will be able to recoup their costs.)

The United Kingdom seems isolated in proactively pursuing its golden goal, to the nation's disadvantage. Both the United States and the European Commission will allow researchers to pay for their work to be made free immediately, but neither requires it. If major international funders are happy to keep full papers behind paywalls for a year or more, the United Kingdom's libraries will find it difficult to reduce their subscription budget. For a time, Britain will be paying extra for its vision of gold open access.

The length of this transition period is one of the concerns for UK libraries and researchers scrambling to adjust to the policy before it comes in. A report released last week by the House of Lords said that this confusion was "unacceptable", although the report committee was

mollified by reassurance that Research Councils UK would transition to the gold policy slowly over five years, and would review it in 2014. The Higher Education Funding Council for England, another UK group that supports universities through taxpayer-funded grants,

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says only that it wants research to be open access, without expressing a preference for green or gold.

UK science minister David Willetts is coming under pressure to justify the country's preference for immediate open access. At a meeting this week at the Royal Society in London, he argued correctly that only

gold unambiguously achieves the objective of open access for taxpayer-funded research when it is published — an objective surely worth paying a transitional price for.

The US position acknowledges the reality that the country's funding bodies have bigger short-term priorities. And despite the White House's stated green-access policy, much work from federal agencies such as the National Institutes of Health and the National Science Foundation is even now published through the gold open-access route — some researchers are keen to pay for their work to be made open immediately even when they are not compelled to do so. As for *Nature*, we view the US position as a signal that in the longer term, for highly selective journals, fully funded gold open access is a scientific necessity. ■

Starvation diet

A severe approach to slashing US spending bodes ill for the research enterprise.

Unless a miraculous truce descends on a deeply polarized Congress before the end of this week, the US government will be forced to cram US\$85 billion in across-the-board spending cuts into the seven months that remain of the fiscal year. Science agencies will not be spared. The \$30.7-billion National Institutes of Health (NIH) will lose \$1.6 billion; the National Science Foundation (NSF), more than \$370 million; the Department of Energy's Office of Science, \$260 million; and NASA's science budget, almost \$270 million.

The cuts, known as 'sequestration', are already having an impact, as agencies pare back or cling to their grant dollars, anticipating the worst (see *Nature* **494**, 158–159; 2013). In biomedical labs, postdocs are not being hired and equipment repairs are being put off. At the