

Academic publishers have become the enemies of science

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The US Research Works Act would allow publishers to line their pockets by locking publicly funded research behind paywalls. The free dissemination of lifesaving medical research around the world would be prevented under the Research Works Act.

This is the moment [academic publishers gave up all pretence of being on the side of scientists](#). Their rhetoric has traditionally been of partnering with scientists, but the truth is that for some time now scientific publishers have been anti-science and anti-publication. [The Research Works Act](#), introduced in the US Congress on 16 December, amounts to a declaration of war by the publishers.

The USA's main funding agency for health-related research is the National Institutes of Health, with a \$30bn annual budget. [The NIH has a public access policy](#) that says taxpayer-funded research must be freely accessible online. This means that members of the public, having paid once to have the research done, don't have to pay for it again when they read it – a wholly reasonable policy, and one with enormous humanitarian implications because it means the results of medical research are made freely available around the world.

[A similar policy is now being adopted in the UK](#). On page 76 of the policy document [Innovation and Research Strategy for Growth](#) the government states that it is "committed to ensuring that publicly funded research should be accessible free of charge". All of this is great for the progress of science, which has always been based on the free flow of ideas, the sharing of data, and standing on the shoulders of giants.

But what's good for science isn't necessarily good for science publishers, whose interests have drifted far out of alignment with ours. Under the old model, publishers become the owners of the papers they publish, holding the copyright and selling copies around the world – a useful service in pre-internet days. But now that it's a trivial undertaking to make a paper globally available, there is no reason why scientists need yield copyright to publishers.

The contribution that publishers make – coordinating editors, formatting, and posting on websites – is now a service that authors can pay for, rather than a bargaining chip that could be worth yielding copyright for. So authors making their work available as open access pay publishers a fee to do so, and the publisher does not own the resulting work.

Open-access publishers such as the [Public Library of Science](#) are able to make a modest profit on a publication fee of \$1,350 (£880). But traditional publishers have become used to making much more than this, and so resist the inevitable conversion to open access. Early in the process, they did this by [pouring scorn on PLoS](#), predicting that it would never take off. But now that [PLoS ONE is the world's largest academic journal](#), that attack can hardly be maintained. Instead, publishers have turned to the approach that uncompetitive corporations have always used in America: lobbying for legislation to protect their unsustainable model.

If passed, the Research Works Act (RWA) would prohibit the NIH's public access policy and anything similar enacted by other federal agencies, locking publicly funded research behind paywalls. The result would be an ethical disaster: [preventable deaths](#) in developing countries, and an incalculable loss for science in the USA and worldwide. The only winners would be publishing corporations such as Elsevier ([£724m profits on revenues of £2b in 2010](#) – an astounding 36% of revenue taken as profit).

Since Elsevier's obscene additional profits would be drained from America to the company's base in the Netherlands if this bill were enacted, what kind of American politician would support it? The RWA is co-sponsored by Darrell Issa (Republican, California) and Carolyn B. Maloney (Democrat, New York). In the 2012 election cycle, Elsevier and its senior executives made [31 donations to representatives](#): of these, two went to Issa and 12 to Maloney, including the largest individual contribution.

For all their talk of partnering with scientists, Elsevier's true agenda is nothing nobler than to line their pockets at the expense of scientists worldwide and everyone with a preventable or treatable disease.

It's hardly surprising that publishers would fight dirty to hang on to a business model where scientists do research that is largely publicly funded, and write manuscripts and prepare figures at no cost to the journal; [other scientists perform peer-review for free](#); and other scientists handle the editorial tasks for free or for token stipends. The result of all this free and far-below-minimum-wage professional work is journal articles in which the publisher, which has done almost nothing, owns the copyright and is able to sell copies back to libraries at monopolistic costs, and to individuals at \$30 or more per view.

What is surprising is how complicit scientists are in perpetuating this feudal system. The RWA is [noisily supported by the Association of American Publishers](#), which has as members more than 50 scholarly societies – including, ironically, the American Association for the Advancement of Science, which by its implicit support of the RWA is making itself an association for the *retardation* of science.

What can we do to prevent the RWA from passing? US citizens should write to their representatives explaining what a disaster it would create, and how unfair and unnecessary it is. And every working scientist should check their professional memberships to see whether their dues are being forwarded to an association that promotes sending science back into walled gardens. If so we should pressure our professional societies to withdraw from the Association of American Publishers, or at least to [publicly state their opposition to the RWA](#) .

The bottom line for scientists is that many [publishers have now made themselves our enemies](#) instead of the allies they once were. Elsevier's business does not make money by publishing our work, but by doing the exact opposite: restricting access to it. We must not be complicit in their newest attempt to cripple the progress of science.