

The power and importance of open access

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I first realised the power and importance of open access when I was working as an editor at the *Lancet* in the very early 2000s. I also remember the paper that triggered my interest – it was on the risk of stillbirth after caesarean section. It was an important paper, and it was reported on sensationally in the press – that the risk of stillbirth doubled after caesarean section. This result was true as a relative risk, but the absolute risk was small – but you could only understand this if you read the whole paper. And the paper was closed access so most people could not.

It was this paper and the realisation that the *Lancet* – and indeed other influential medical journals other than the BMJ – were not going to change anytime soon, that set in train the sequence of events that led me to leave the *Lancet* in early 2004 to set up [PLOS Medicine](#) with two other editors, Barbara Cohen and Gavin Yamey, and a committed and talented small staff, who had already launched *PLOS Biology* in 2003. It was one of the defining moments of my career and led me to be part of what I believe was then the most important development in the dissemination of academic knowledge since journals were founded.

PLOS was founded to make research accessible to all and to do this it aimed to turn publishing on its head through changing the business model – to pay upfront once for the publication of individual articles through article processing charges, instead of the established system then of subscriptions, where of course multiple people paid multiple times to access individual articles. Making research open was a cause I believed passionately in and which I also believed could be combined with a better vision for medical journals: as we said in *PLOS Medicine's* first editorial, we aimed to be a medical journal that published on disease that took the greatest toll on health globally. We were ambitious and edgy: we were once called the “journal of left-wing epidemiology” (we took that as a compliment) and in

a very proud moment managed to annoy the right-wing American commentator, Rush Limbaugh.

We also wanted to shake up publishing in other ways: *PLOS One*, launched in 2006, had the astonishing slogan at the beginning “we want to publish your work” – a revolutionary concept in a time of then predominantly selective journals. PLOS also began to incorporate some of the foundations of open science – with requirements for data sharing, and, well, before DORA existed, calling out [the problems with impact factors](#).

What I didn't have a good realisation of then was the much wider world of open access and the importance of a diversity of models, especially those that provide an alternative to individual article processing charges, such as SciELO and the other Latin American models in particular. We had begun to realise that article processing charges could turn inequity in accessing research into inequity in publishing research and from very early on, fee waivers were built into the PLOS model and budget, but this was a far from satisfactory solution.

When I moved to Australia in 2013 and became director of an open access advocacy organisation – now known as [Open Access Australasia](#) – I really became aware of the huge ecosystem of open access models, most recently and eloquently described as [bibliodiversity](#). It became part of my day job to advocate for these diverse models, including, critically in our region, publishing outlets that support local, Indigenous led research. I also gained much greater understanding of the role of university repositories as a route to open access, especially as an alternative to commercial models. I've also worked to support a greater understanding of how open access fits into the wider [open science landscape](#).

The last few years have strengthened my opinion that we must have a clear-eyed view of the roles and motives of all participants in the global publishing system. Where open access – and more recently open science – has been most successful is where there has been wide engagement by organisations and individuals across the system, with, crucially, leadership from the top. The COVID pandemic showed us as never so clearly before, just how critical open access and open science is in addressing the global challenges of our times. Yet, even then some traditional publishing companies had to be cajoled to participate and now, as the pandemic recedes in our collective consciousness, many publishers still do not fully embrace open access, unless it can protect their profit margins. I'm

completely convinced that if back in 2004 the influential medical journals had decided that they would embrace open access, we would have accelerated adoption across all levels of publishing. That they didn't, I think, is a real stain on those journals and their publishers. Furthermore, it should make us alert to other activities - around data collection for example, as recently articulated by Sarah Lamdan, in her book [Data Cartels](#), and not walk oblivious into a future dominated by one model of publishing.

The future of open access must be one that is *bibliodiverse* and equitable. As open access becomes more and more mainstream, there is a collective responsibility that every organisation – whatever their business model – commits to these principles.