"It's the authors, stupid!"

Of all the groups that want open access to scientific and scholarly research literature, only one is in a position to deliver it: authors. There are three reasons why:

- Authors decide whether to submit their work to OA journals.
- Authors decide whether to deposit their work in OA archives.
- Authors decide whether to transfer copyright.

If you support OA, then the good news is that authors don't need anyone else's permission or cooperation to provide OA to their own work. The bad news is that research authors are notoriously anarchical and do not act as a bloc. If you oppose OA, then simply switch the good news and the bad.

So even though readers, libraries, universities, foundations, and governments want OA for their own reasons, most of what they can do to promote OA takes the form of guiding, helping, or nudging authors. In this sense, authors have primacy in the campaign for OA, and the single largest obstacle to OA is author inertia or omission.

Once we recognize this, we will focus on four author-centric strategies for achieving OA:

- 1. Educate authors about OA
- 2. Help authors provide OA to their work
- 3. Remove disincentives for authors to provide OA to their work
- 4. Create incentives for authors to provide OA to their work

Let's consider these in order.

(1) Educate authors about OA

Author inertia or omission is not a sign of opposition. Usually it is a sign of ignorance or inattention. Most scientists and scholars are too preoccupied with their research to know what open access is --even today, after years of rising public recognition. This is harmful

to OA, to science, and to the authors themselves, but it's hard to criticize directly.

Research faculty are good at what they do because they are absorbed in their projects and have extraordinary talents for shutting out distractions. We're coping here with a side-effect of this strength, not with a simple weakness.

A new CIBER study shows that 82% of senior researchers (4,000 thousand in 97 countries) knew "nothing" or just "a little" about OA. Even if the numbers are better for junior faculty, we clearly have a long way to go just to educate the scientists and scholars themselves.

http://ciber.soi.city.ac.uk/ciber-pa-report.pdf

Talk to your colleagues about OA. Talk them on campus and at conferences. Talk to them to them in writing through the journals and newsletters that serve your field. Talk

to your students, the authors of tomorrow.

If you have provided OA to your own work, talk to your colleagues about your experience. Firsthand testimonials from trusted colleagues are much more effective than policy arguments, even good policy arguments. They are also more effective with this audience than advice from librarians or university administrators, even good advice. The chief problem is getting the attention of busy colleagues and showing them that this matters for their research impact and career. Only researchers can do this for other researchers.

A surprising number of OA converts --I'm one-- didn't go beyond understanding to enthusiasm until they provided OA to their own writings and saw for themselves, sometimes suddenly, the signs of rising impact. There is a discernible increase in email from serious readers, inclusions in course syllabi, links from online indices, invitations to important conferences, and citations from other publications. When you experience this in your own case, it's anecdotal but compelling. When you hear it from a trusted colleague, it makes a difference.

If you don't have time for sustained campaigning, then at least respond to misunderstandings. Don't let damaging myths circulate without correction. When someone says that OA bypasses peer review or violates copyright, correct them. When someone says that OA is naive because "there's no free lunch", point out that no OA advocate ever said that providing OA was without expense. (The question is whether there are better ways to cover those expenses than by charging readers or their libraries for access.)

The best compendium of common myths about OA, decisively corrected, is by BioMed Central.

http://www.biomedcentral.com/openaccess/inquiry/myths/

Let's say that x is the percentage of publishing scientists and scholars who have already provided OA to at least some of their writings. To jumpstart progress significantly, we don't need x to rise to 100 or even 50. We need the percentage of publishing scientists and scholars *who have heard about the benefits of OA firsthand from a trusted colleague* to rise to 2x. If 5-10% of university faculty publish 80% of the articles, then a slight widening of the current circle will encompass a critical mass of authors.

Many scholars are not at all ignorant of OA, but say they are just too busy to take the steps to provide it for their own research articles. I'm sympathetic, because full-time teacher-researchers *are* very busy. But I'm not very sympathetic. Scholars who have time to do research and write it up don't begrudge this time, because this is work they love. But if they get this far, then they always find time for follow-up steps that they do not love: submitting the articles to journals and responding to referee comments. Finally, they always seem to have time to bring their published articles to the attention of department chairs, deans, promotion and tenure committees, and colleagues in the field. Scholars find the time for these steps because they are passionate about their research,

because they want to share it with others, and (for the unloved steps) because they see the connection between them and career-building.

Providing OA to our work is career-building. The benefits to others are significant, but dwelling on them might have drawn attention away from the strong self-interest that authors have in OA. Get the attention of your colleagues and make this point. OA is about barrier-free sharing of research results with colleagues worldwide. This enlarges our audience and increases our impact. Anyone who takes half an hour to email an updated bibliography to the department chair or to snail-mail offprints to colleagues on other campuses should take five minutes to deposit a new article in an open-access archive or institutional repository. Enlighten your colleagues.

(2) Help authors provide OA to their work

Even when scholars see the connection between OA and research impact, they have to set priorities. It's not surprising that they give new research priority over enhancing the dissemination of old research, or that they give work with near deadlines priority over work with no deadlines. Here is where concrete help comes in.

Librarians can help faculty members deposit their work in an open-access, OAIcompliant archive, such as the university's institutional repository. It doesn't matter whether authors need help because they are too busy, because they are intimidated by metadata, or because their past work is voluminous or pre-digital. Librarians can help them digitize and deposit it. In most cases, student library workers can help in the same way.

Universities can help by providing the funds to pay librarians or student workers to provide this kind of help. They can help by paying the processing fees charged by OA journals when funding agencies will not do so. They can help by offering workshops on how authors can retain the rights they need to authorize OA. They can help by suggesting model language for authors to use in copyright transfer agreements.

(3) Remove disincentives for authors to provide OA to their work

When Franz Ingelfinger was the editor of the New England Journal of Medicine, he adopted a policy not to accept any article that had previously been published or publicized elsewhere. As the policy spread to other journals, it became known as the Ingelfinger Rule. It seems to be in decline nowadays, but it's hard to tell because many journals do not say explicitly on their web sites whether or not they follow the rule. The rule, and the uncertainty about where it applies, deter authors from depositing their preprints in OA archives. Researchers who proudly disregard the risk that their work will offend church and state flee from the risk that preprint archiving will disqualify their work for later publication in a peer-reviewed journal.

The best way for journals to remove this disincentive is to abandon or modify the Ingelfinger Rule and to say so publicly. Journals only have to modify the rule enough to

let authors take advantage of online preprint exchanges. They can still refuse to consider submissions that have been formally published elsewhere. The second best way for journals to remove this disincentive is to make their policies clear and explicit on their web sites so that authors can make informed decisions about the risks. Authors in fields where the rule is rare, or who have no plans to submit their work to journals where it is still in force, will then have the confidence to provide OA to their preprints.

Promotion and tenure committees (P&T committees) create a disincentive for submitting work to OA journals when they only reward work published in a certain set of highimpact journals. The problem is that most OA journals are new and don't yet have impact factors. When a committee makes impact factor a necessary condition for review, then it discriminates against new journals, even excellent new journals. It not only discriminates against new journals trying out a new business and distribution model, but against journals exploring a new research niche or methodology. The problem is not the committee's attempt to weed out the second-rate. The problem is doing it badly, with a crude criterion, so that the committee also rules out much that is first-rate.

Administrators who understand this problem can set policy for their P&T committees. Faculty who understand this problem can volunteer to serve on the committee.

Foundations that fund research are often as blinkered as P&T committees, even if the same foundations try to support OA through other policies. If they tend to award grants only to applicants who have published in the usual small set of high-impact journals, then they deter authors from publishing in OA journals, even while they show support by offering to pay the processing fees charged by OA journals.

(4) Create incentives for authors to provide OA to their work

Universities can create an incentive by requiring OA to all the research articles that faculty would like the P&T committee to consider. Because this can be done through OA archives, it is compatible with publishing the same articles in conventional, subscriptionbased journals. The policy needn't limit the freedom of authors to publish in any journal that will accept their work.

Funding agencies, public and private, can create an incentive for authors by requiring OA to the results of the funded research. They should let authors choose between OA archives and OA journals, and should make reasonable exceptions, e.g. for classified research and patentable discoveries.

Authors would not oppose these steps. A February 2004 study by JISC and OSI found (pp. 56-57) that when authors are asked "how they would feel if their employer or funding body required them to deposit copies of their published articles in one or more [open-access] repositories...[t]he vast majority, even of the non-OA author group, said they *would do so willingly*." (Italics in original.)

http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf

Finally, we could provide a significant incentive for authors if we could make OA journals as prestigious as conventional journals of the same quality. Unfortunately, it's easier to control a journal's actual excellence than its reputed excellence, and prestige is all about reputed excellence. One way to boost prestige is to recruit eminent scholars to serve on the editorial board, a method used effectively by PLoS Biology and BMC's Journal of Biology. Another way is for eminent scholars who are beyond the reach of myopic P&T committees to submit new, excellent work to OA journals. This will tend to break the vicious circle by which new OA journals need excellent submissions to build prestige, and need prestige to attract excellent submissions.

* Conclusion. I've argued for author primacy, but only for achieving OA, not necessarily for any other purpose. For example, I make no claim that authors are the only ones to benefit from OA or that their reasons for wanting it are the only reasons for wanting it. Nor do I claim that it's more important for authors to solve their problems (in achieving visibility and impact) than for other stakeholders to solve their problems (libraries regaining control of their serials budgets, funders increasing the return on their investment in research, or taxpayers gaining access to the results of taxpayer-funded research). Nor do I claim that OA is more effective in helping authors advance their interests than it is in helping, say, libraries, foundations, or democratic governments advance theirs. Since OA will serve the interests of many groups in many ways, there is no need to rank or choose among these interests. Let's just work for OA and advance all their interests at the same time.

But thinking about how to achieve OA is different from thinking about who benefits or by how much. It's when we think about how to achieve OA that we must recognize the primacy of authors. Many groups suffer from dysfunctions in the current system of scholarly communication, but authors are at the frontline of control over the solution. Author decisions will affect the degree to which we achieve OA and the rate at which we achieve it.

It does not follow that we should only appeal to authors. Rather, we should focus first on authors and the institutions in a position to influence authors. If we limit our appeal to authors, then we will sacrifice the power of a wide partnership of stakeholders, not to mention powerful ways to influence authors themselves. If we overlook authors, or focus first on another group, like publishers, then we will miss precious opportunities to realize the benefits of OA for everyone.