

## Open Access: Democratising Knowledge

**Prof Geoffrey Boulton –** Opening up science and opening up data and opening up dialogue, in my view, is all about maintaining an open society. Ultimately, it is about democracy.

**Prof David De Roure –** The idea has been around for 350 years, and there is a good reason for that, it is quite good as an idea. Fundamental to open scholarship and will be with us for some time. It is the best way to do scholarly communication. It is also very exciting current discussion, and that discussion must occur because the way we do research is changing so much.

**Jisc -** Scholarships are changing, and that change can be summed up in one word, open. The buzz around open is getting louder all the time. Open access, open data, open science. All are adding up to open scholarship.

**Tyler Walter –** Funding is changing, governments are changing, accountability and structures are changing, technologies are changing; all this is really impacting what we do as higher institutions.

**Jisc –** Huge shifts are taking place in the way scholars share their ideas. The open revolution is moving beyond the scholarly journal to touch on all areas of academic endeavour.

**Clifford Lynch -** There is a lot of momentum behind opening up journal articles. What happens to scholarly books which are particularly critical in the humanistic fields, is the extended argument, which is typical of scholarly monograph that is often viewed as the essential unit of scholarly communication in those fields. We can move towards opening up a lot more of that material. And that material also encompasses the very newest forms of digital research. Social media is actually a place where the citizens are creating new ways of doing things, new social processes. Opening up is also taking place behind the scenes, searing research data in an open way makes things possible, helping to provide fresh answers to some of the most pressing challenges we face.

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**Racheal Bruce –** We should be opening up research data for two key reasons. One is about research integrity, that's about the reproducibility of science and research quality and the second is about research use, and that's about exploitation and in a sense, you could see that as focused on collaboration.

So, by opening up your data, you make it easy for others working with you to add to that research and stand on the shoulders of giants. So, if you look at things like global and health and the environment, we know that cross-disciplinary research is absolutely essential to answer those global challenges.

**Jisc –** But while the old ways are clearly changing, the journey to openness is not without its stumbling blocks, there are challenges within the academy.

**Richard Ovenden -** The block of the academic community has yet to be convinced that open access is a realistic alternative.

**Jisc –** And also, in the marketplace.

**Robert Kiley –** One of the key problems we experience at the moment is around this thing called hybrid publishing, which is where a subscription journal still levies subscriptions but also charges an open access fee to make articles open access. So, I think we as a community need to move the model from a subscription model to an open-access model, but that transition time cannot be indefinite.

**Jisc –** So, what needs to happen now to make that move and make sure the future is truly open?

**Tyler Walter-** Culture change.

**Sarah Thomas –** We need information policies that will enable us to make informed decisions. We need money because there is no such thing as a free lunch, and we need to change the culture.

**Jisc –** That cultural change needs to go hand in hand with structural changes; the old model needs to adapt to these new ways of working so that everyone benefits.

**MacKenzie Smith –** There is a big disconnect between what young researchers would like to do, to be more efficient, to be more modern, to be better at what they are doing as researchers and how they are rewarded.

**Racheal Bruce -** So why should a researcher share their data, if they are quite happy getting on with their own research, in their own environment? So, we have really got to work out what the reward structure is. There are citations, data citations, even that we haven't cracked, we haven't got citation rolled out. But then I think there are more complex issues in really understanding how to reward open science and innovative practice within research.

- Jisc –** But openness is a source that can and must be searched beyond researchers and beyond the academic community.
- Dr Elliot Shore-** I think there has been a lot of talking to ourselves and among ourselves about these issues, but the folks that we need to think with are the faculty members, and also the public. I think we see ourselves as guardians of a notion of openness that not everyone shares, and not everyone understands.
- Prof Stephen Curry –** Although I think many people are sceptical that the public doesn't really need to see the primary literature, because they are not equipped to read it and understand it, I think that massively underestimates the general public. Open access will help to stimulate even more public hunger to access science, and I think we have a duty to provide them with that because much of our work is funded by them.
- Jisc –** The open revolution is transforming academia, but more exciting is its potential to transform the way the whole world uses and shares our accumulated knowledge.
- Prof Geoffrey Boulton -** Individual scientists, individual researches, individual scholars, have got to feel that the individual data they collect is not their data, but that it is societies' data, they have got to be prepared to make their data open.
- Sarah Thomas –** We are reaching a tipping point, and the more information we get, the more we can demonstrate that the restrictive policies inhibit creativity and open policies spur innovation.
- Jisc -** People will realise that the narrow control over publication is actually limiting our growth rather than exploding it the way the internet has with innovation and creativity and entrepreneurialism.