

Participant #8

Field: Molecular Biology

Rank: PhD Student

Q: Why did you decide to become a scientist?

A: Just because it's interesting. It was really interesting.

Q: What about it interested you?

A: The idea about asking questions about the state of the world, trying to answer questions about how things work.

Q: What interested you in your field [molecular biology]?

A: I think it's a field with a lot of unanswered questions.

Q: When you are ready to publish, what do you look for in a journal?

A: For me it's always the fit of the journal for the topic, so what kinds of things the journal publishes and how similar that is to the paper we want to publish.

Q: How much does the Impact Factor of a journal matter to your choice?

A: For me I try not to let it, but obviously as a PhD student making the decision of the journal on your own, and I think for most supervisors it factors into a lot more in the sense that there's the idea that there's a minimum impact factor that is acceptable.

Q: Why do you think your supervisors feel that way about Impact Factor?

A: Because of university pressures.

Q: Do you think your supervisors feel pressured to publish in high Impact Factor journals?

A: Yes, but I think also without the university pressure as well. You want your work to be visible, as visible as possible.

Q: Do you feel pressured to publish in high Impact Factor journals?

A: A little.

Q: Do you think that pressure may increase throughout your career?

A: I think it will increase, but I hope that as the world of scientific publishing changes over time it will become less important. These kind of measures of the journals you're publishing in

and it will become easier to get the relevant papers to the relevant people without having to do it by publishing in a really good journal. But I think the pressure to publish in high Impact Factor journals will probably increase.

Q: You mentioned the changing of scientific publishing. How do you want science publishing to change?

A: I am a supporter of Open Access, because I don't think it makes any sense to have a subscription model to journals. I think the Open Access model makes a lot more sense and widens access to more people. But I also think that one of the things I would like to see is journals innovating more, so I know there are some newer journals are trying to innovate a bit more in the sense of new ways of displaying content, like e-life lens, or things like figures are static and can be updated over time. I really hope that we'll see more things like that rather than journals being the gatekeeper of what is and isn't published, actually doing more to think about new ways to show the content of what is published that is more informative.

Q: What do you think the role of Open Access is in science?

A: I think it plays an important role of making scientific papers more accessible to people who are studying science, but perhaps are at universities or in countries that aren't so well off and can't afford expensive subscriptions to all the possible journals they might want to read. But I would say for the average scientist in the UK it won't probably make a huge amount of difference to what they can access. I would hope it would make a difference to how science is talked about in the media or between non-scientists if the papers themselves are more accessible or fact checking and so on.

Q: What attracts you to wanting to be an Open scientist?

A: For me the aspect of open science that are more important than open access are open data and open code or open software, because I do some computational biology work and for that we often rely on having other people's data available so that we can use and combine with our own data. So, I really understand the value of open data because I've really had to rely on it so much. As for the open code I think it's very important for reproducibility purposes. It's so common to see a paper that has been published where they come up with a great method and they sort of describe the theory behind it in the methods section, but they don't describe or produce the actual code. So you have to duplicate that effort that goes into it, or you find that even though they describe the method you can't actually reproduce what they found. And it's just a waste of time all around to be honest if people come up with a great method and don't release the code for it. We should be reusing those sort of things a lot more if we could.

Q: When you were first published, how did it make you feel?

A: Good. But slightly.. it all happened very quickly. It didn't really sink in, basically.

Q: Some others have said when they were first published they felt like they were a real scientist. Did you feel that way?

A: No, not really. I do think only over time that I've realized just how much it helps. It's not something I felt instantly, but after like six months or so I sort of realized it gives you a lot of, though I don't think it makes me feel more like a real scientist or it makes me more of a real scientist compared to my colleagues who haven't published, I think other people see having published as a PhD sort of as a tickmark, it's one less to worry about about that person. Okay, they've published something, so they must be decent. So, it helps a lot.

Q: How does that make you feel?

A: I think it would be difficult to call yourself a scientist for say ten years and you never published within that time, so I'm not saying that someone's identity as a scientist can be completely separate from them having published a paper or produced some kind of tool or software or technique that other people can use. I guess the reason I didn't think it changed that much is because, at least in the PhD programme I'm in, pretty much everyone will publish something so it's just a matter of when. So, I published early compared to most people in my PhD programme.

Q: Have you been cited?

A: Yes.

Q: How did that make you feel?

A: Nice. It's nice to know other people are actually reading it.

Q: Do you think your desire to be an open scientist will impact your career?

A: Perhaps. I suppose it depends how far you take it. If you're very aggressive about publishing in only open access journals and advocating for open data and open code can affect the types of people who are going to hire you if nothing else. I think for me the biggest impact for me, I'm not looking too far into the future at the moment, is that I would like to do a postdoc in a lab that is supportive of open science if I do a postdoc. Because where I am currently there's people who are generally okay with the idea of people sharing their data or code, but there's really no one around that has a lot of experience with open science, the best ways to do these sort of things.

Q: How do others in your department, such as your supervisors or colleagues, view open science?

A: I think most of them see it as a necessary hoop to jump through, because a lot of funding bodies are starting to expect or require things to be published Open Access or be free after six months. So, they, I think, most people in the department they are acceptive of Open Access but they don't feel particularly strong about it.

Q: Do you have appraisals or something similar as a PhD students?

A: We have assessments at 9 months and one at 18 months about the research you're doing if that counts as an appraisal.

Q: In these assessments are publications ever a factor or is that too early on?

A: No, it's way too early on. They wouldn't assess whether or not you had published. In face where I am you don't have to publish in order to finish your PhD.

Q: Do you feel there's less pressure on you as a PhD student then?

A: Well, certainly less than other places, but I also think that because of that you can end up with environments where rather than, so, if you're required to publish something before you graduate you can end up with people who have solid, but not ground breaking papers that are being published and new tools or something quite specific. But if you're in an environment where you don't have to publish something to graduate there's more pressure to only do really big papers, so because your students have to publish to graduate you can end up in a situation where students either publish something really big and exciting in a very high impact factor journal, or they don't publish at all. And I feel that's worse for the students, because the majority, well, as first author at all. And as students it would probably be better to have a nice, small, first author paper rather than nothing and a small chance of a very big paper. You would think it would reduce the pressure, but I don't really think it does.

Q: How would you characterise the support you receive from your department with publishing?

A: I don't really think there really is any support at all or any real pressure from the department as a whole. As I said, they don't require us to publish to finish, so that's not pressure coming from the department, but they also don't particularly offer any guidance. Most of the pressure and the support comes from the group level.