BIOSCIENTIST
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Scientific communication

Alia Usman Boda

In this interview, Alia Boda, a Human Biology and Infectious Diseases student, had an opportunity to speak to Craig Brierley, the Head of Research Communications at the University of Cambridge, to gain insights on effective communication in science, particularly showcasing novel research.

Alia Boda: Thank you once again, Craig, for doing this interview with us. Please will you tell us a little bit about yourself and your role?

Craig Brierley: I am the Head of Research Communications at the University of Cambridge. My team here is responsible for telling the stories about research that takes place across the University. That is through media relations and via our website to public audiences and other stakeholders, to people across the University, other researchers, researchers outside the University, industry collaborators, policymakers, etc.

AB: What research have you come across which you have found interesting?

CB: That's a really difficult question because there is so much that I come across on a day-to-day basis that is fascinating. For me, one of the genuine privileges of doing this job is that I am working with some of the people that are at the absolute top of their field, and these are the people that will sit down and explain their research to you and talk you through it. It is genuinely quite exciting to be able to do that. For example, I was speaking to a researcher who is using virtual reality gaming to try and help people overcome anxiety, so that is really cool when you get to play with a bit of kit and experiment with yourself. Likewise, there are other times when you'll sit down with somebody that does very fundamental research that on paper could sound boring, but when you get chatting to them you can see the passion in them and that can be quite exciting; you realise that you're probably one of the first people in the world to be hearing about this. Just last week I went across to meet one of the heads of one of our colleges (former UK ambassador to Russia and Afghanistan) who spent half an hour with us telling us about Ukraine and Russia, why Russia had invaded Ukraine and what his thoughts are on the war and so on. To get access to somebody like that is really, really quite something.

AB: Having completed two research placements myself and conducting research for my final year dissertation, I am starting to appreciate how much is currently unknown and the opportunities that are available to try and expand our knowledge. The possibilities provided by modern research amazes me too. What interested you in science communication?

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CB: I studied physics at university quite a long time ago and I really enjoyed it. I enjoyed science, I found it quite good fun. I was never very good at practical experiments, so I tended to go down a bit more of the theoretical physics route. While I was doing my degree, there was a course called communication of scientific ideas which I thought sounded interesting. As part of the course, you had to follow a researcher in a different department to yours, one where you were not an expert in it, you had to interview them, and you had to write a news story feature. I got a botanist, but his particular area of focus was looking at how plants absorb nuclear isotopes, and this was in relation to what was done with nuclear waste, burying nuclear waste underground. I found it interesting trying to tease the story out and write about it. When I went to interview him, I spotted a book in Russian on his shelf and just happened to ask him, oh, do you speak Russian? He told me this story about how he had gone to Chernobyl in the aftermath of the nuclear reactor meltdown there. He was telling me all about how it was like a deserted village that had just been abandoned. It looked like an empty village. I got a really, fascinating interview out of it and so that really excited me. That was the point where I realised that I was quite interested in science communication. Like many people, I began a PhD but not really knowing what I wanted to do or why I wanted to do a PhD or even really whether I wanted to do a PhD, it was the natural route. Three months in, I realised that this just was not for me. You have got to have a particular mindset to be a scientist, and I did not have that in me. I was still passionate about science, but I was interested in the result, let somebody else do all the hard work and then come in and help them communicate their findings to the outside world. That was the route that I ended up going down. I quit my PhD and after a short break, came back and went down the science communication route.

AB: The fact that you have experienced starting that PhD but realising that it was not for you and then finding something that you are passionate about is something that many students might find inspiring. Many students currently do not know what they want to do, and they may think that the only route is completing a PhD but working in a lab might not be everyone's cup of tea. Like you said, it might be that the result interests them more, rather than figuring out those answers. What do you think is the most important part of effective science communication?

CB: I think an ability to take a step back outside of science and look at it from an external perspective. You will often find when you are talking to researchers that they are very focused on their particular piece of research but sometimes they can miss the bigger picture. Often, it takes somebody as an outsider to come in and almost ask the stupid questions that to them are sometimes more challenging than the questions from their peers because they have not necessarily thought about that. I think an ability to ask and not to be afraid to ask what may seem like stupid questions is crucial because often these can get the best answers out of your researchers.

AB: The use of social media is growing every day, including platforms like Instagram and TikTok. Do you think these platforms pose a new beginning for science communication?

CB: I'm not sure I would describe it as a new beginning, they are just new tools that science communicators can use. They give more opportunities to people to communicate their research, whereas 20 years ago, researchers would rely on their press offices or their communications offices to get their research out. Now they have opportunities to get it out to a wider audience directly through social media channels. I was at a workshop yesterday where somebody said that these days, a lot of early career researchers are being encouraged to have social media profiles and to build their own profile on Twitter and other social media outlets. Of course, there are challenges to using social media, in part because the platforms can change so much. It used to be all about Facebook then it was about Twitter, and we are increasingly finding that Twitter is not as effective as it used to be for getting our stories out. LinkedIn has come to prominence for us, as a university, for getting our research stories out where we tend to get more engagement

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Essentially, if you are a researcher, it probably would do you good to have a social media profile but do be careful not to allow it to become too distracting, which is obviously one of the challenges of social media. Do look at what other people are doing on social media, how they are using it, and see if there are ways that other people are using it particularly well that you could model yourself on.

AB: I think LinkedIn is quite trendy nowadays, even amongst students at university who are using the platform to make themselves a professional profile. Many students feel that LinkedIn is a way to connect with people in the fields they are interested in whilst also showcasing them professionally.

CB: I want to say one other thing about social media: One other thing to do is think about which is the most appropriate platform for the people that you are trying to reach and consider what the best style is for that. For example, if you are trying to reach other researchers, often Twitter is the best way for that. If you are trying to communicate to the public, well actually you might find that it is TikTok. If you are trying to appeal to a young, particularly young demographic, then definitely get on to TikTok.

AB: One of the questions I had related to my own observations – public awareness. A lot of the public do not have much awareness about the research that takes place. With the use of social media apps becoming more widespread and becoming more significant in people's lives, have you found that social media has had an impact on general awareness on current research?

CB: I am not sure to what extent social media has influenced that. There are things that externally influence how engaged people are with research. For example, during the COVID pandemic, it was interesting going into that very few people knew anything about immunology or epidemiology and, six months into it, you would be having a conversation in a pub with a friend about R-numbers. There are things like that influence how engaged people get with research. One of the challenges with social media is misinformation and social media has made it so much easier for misinformation to spread. We saw that with COVID misinformation or disinformation about the vaccines, for example. One thing people need to be aware of when they are using social media as a consumer is, is the source for this reliable? Where is this information coming from?

AB: There is a lot of research that takes place within Cambridge, especially within the scientific community. Does the fast pace of research sometimes pose a significant challenge? If so, are there procedures put in place to keep work efficient and effective?

CB: We are well resourced in our research communications team at the university, but even so you can imagine that across the university there are several thousands of people doing research. It is impossible to keep abreast of everything that is taking place there. Having said that, a lot of research is incremental. We would not necessarily be writing about every single research paper that is coming out. We have to pick the stories that we think will appeal to a wide audience and there are various criteria that we use to select those stories, but we end up only covering an exceedingly small fraction of the research that goes on at the university. Part of the work of our team is awareness raising around the university, showing we can do to support them, and how we can help them communicate their research to a wider audience. Most researchers are very receptive to our help, but it is not necessarily something that they are always thinking about. Most researchers tend to be very focused on their research, not necessarily on how they communicate it to a wider world. We must get active and convince them that they should be doing this and show them how we can support them.

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AB: Your approach to curating valuable stories is valuable to students working on Bioscientist Magazine! Our final question: Do you have any advice for students who may be considering a career in science communication?

CB: I'd say go ahead and try it. If you want to pursue a career in science communication, it is becoming increasingly competitive to get a job in it. From a recruiter's perspective, what you are looking for in applicants is somebody who demonstrates that they have a passion for science communication. It is all very well people simply saying, “I'm passionate about science communication!” but if you have done nothing to show this then it is less likely that we will take a punt on you. If you are based at a university, then look for opportunities to write about the research that goes on there, even if it is just writing pieces for your departmental website, or speak to your university communication office, see if there are any opportunities to help them or to volunteer for a week or so. Likewise, there public engagement opportunities that you can get involved in. For example, at the University of Cambridge, we have a Cambridge Festival every year which involves public talks, workshops, and hands on activities. Throw yourself into these and get involved. Get involved in evening talks in the pub for example, anything that just demonstrates that that you really do want to do this.

AB: Thank you, that’s excellent advice for any students with an interest in the field. I think getting involved in writing articles for our future Bioscientist Magazine issues would also be an effective way to demonstrate that you are interested in the field of science communication. I am sure many students will take that advice on board.

CB: Just jumping back to your earlier question about social media. Social media gives you more opportunity as somebody that wants to get into science communication to have a chance at it. Try your hand at doing a TikTok video or series of TikTok videos that explains some of the science in your area.

AB: That reminds me of a lot of students within the last week, I have spoken to who say that they have YouTube channels to explain scientific concepts. Sounds like that is a great method of science communication as well.

CB: Absolutely. Like I said, if you then come to apply for a job in science communication, you have got something in your portfolio that you can show.

AB: Thank you so much. Craig. Those are all my questions. That was useful because we have identified that a lot of people know about research, but not a lot of students know that they can go down the science communication route. One of the aims of Bioscientist Magazine is to inform students to a variety of career pathways. Right now, anyone doing Biomedical Sciences think that they can only become a Biomedical Scientist and anyone that does what I do, Human Biology and Infectious Diseases, believes that they can only go on to do a master's degree and go on to do a PhD. There are many career prospects available for students studying biomedicine courses, one of them being science communication. This is going to be inspirational for a lot of students.

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