

Science writing and journalism

Alexa Hime,
(Science Education Manager)

As a graduate of the molecular biosciences, there are many different careers and postgraduate study options available to you, in science-related and non-scientific fields. The field of science communication is one which currently has a lot of 'buzz' about it, and the importance of science writers and journalists in engaging with the public is being recognized more and more.

The work of science writers and journalists is important in ensuring that 'bad science' does not influence public opinion and government policy, and that the facts are explained properly and clearly in a user-friendly way. A science writer does not always need detailed in-depth expertise in a particular field, but should have a broad knowledge of science and the scientific process, along with a passion for science and the ability to convey difficult concepts to a non-scientific audience.

The last few years have seen an explosion in the amount of science information available to the general public, with media such as TV, radio and the Internet all jumping on the science bandwagon. With the number of discoveries and advances in science today, there is now, more than ever, a demand for intelligent, engaging science writing and journalism.

If you've got a way with words, there are numerous options available to you if you want to get the message about science across to the masses. There are several courses available that will equip you for the competitive field, and many opportunities to build an impressive portfolio of experience, essential for many potential employers.

Formal qualifications in writing and journalism

A formal postgraduate qualification is not compulsory to become a science writer or journalist, but it does help. The skills required to be successful at studying a science degree are not necessarily the same skills that make a good journalist.

There are many postgraduate Masters and Diploma courses available to science graduates who want to get into journalism, and completing these courses is a standard route. It is not necessary to achieve a specialized qualification in science communication or science writing, as the important skills are covered in more standard journalism courses. Bear in mind that some of the best journalism courses will require some evidence of previous involvement or interest in journalism and media, such as working for a student newspaper or being an intern at a media company. But the specialized science communication or science writing courses available may have different entry requirements that are more suitable to you.

If the long-term commitment of a Masters or Diploma is not an option for you, there are shorter Master classes, one-day courses and conferences that can provide useful training and an insight into the world of science writing.

In 2011, the Biochemical Society joined up with Society for Experimental Biology to organize the first Science Communication

Day, which we plan to run again on 7 June 2012. Find out how the 2011 training day went in the next article, and check out our resource list below.

Resources

Join a science communication discussion list such as PSCI-COMM for up-to-date news and issues: www.jiscmail.ac.uk/cgi-bin/webadmin?A0=psci-com

Check out the Association of British Science Writers: <http://www.absw.org.uk/>

Attend a Café Scientifique for an informal chat about the latest issues in science and technology: <http://www.cafescientifique.org/>

Informal training and work experience

This is essential for those wanting to pursue a career in most areas, but in particular for the competitive world of science communication. Opportunities to gain such experience are readily available if you look for them.

Most journalists and writers will have, at some point, participated in the production of a student or amateur publication, which helps to develop their writing style before they begin a career in journalism. This is a good way to practise and develop your writing and research skills alongside your current career, and helps you to build a portfolio of work to show future employers.

It is also worth contacting your university's outreach team to get involved. These can exist in various forms at most universities – either a formal team for different departments of institutions or a group of keen academics coming together. This could lead to volunteering at events, planning outreach to school students, getting involved with science festivals, talking to public about the current research going on in your area, or even writing articles for a university publication or website – all of which are great experience.

The importance of networking should not be overlooked. This is a good way of meeting the right people and hearing about opportunities. You can look for conferences and events, where other science communicators will be, to help with this.

Many major media companies and publishers will also offer internships for students who wish to make their way into science writing or journalism. As well as companies such as the BBC and publications such as *The Economist*, it may be worth trying for an internship or voluntary work with a scientific organization such as the Biochemical Society or other learned societies.

A career in science writing and journalism

Even with the right qualifications and a few publications under your belt, don't expect to start working as a

science correspondent for a major publication straight away. There's a lot of competition for good permanent posts, so instead many science writers work as freelancers, picking up jobs where they can. Science writers may find themselves writing a science story one day and promotional copy for laboratory equipment the next. It is not uncommon for freelance science writers to find themselves writing articles for non-scientific publications on non-scientific subjects.

When starting out, you may want to try sending speculative articles to major publications in the hope that they will publish it. Although this will not lead to a publication very often, it does mean that you are being recognized by the publication's editor and the article may be used in the future. It is important carefully to adapt the article to each publication's own style and format – make sure even every speculative piece you send out is your best work, as it is a representation of you for editors both now and in the future.

For more information on all the above topics, with useful links to general careers information, training courses, funding, councils and organizations, see www.biochemistry.org/Education/Sciencewritingandjournalism ■

Science Communication Training Day

Frances van Klaveren

(Scientific Conference
Coordinator)

In June last year, the Biochemical Society organized a special science communication training day aimed at doctoral students and postdoctoral researchers. The workshop was designed to enhance participants' skills and help them to demonstrate the impact of their research to schools and the public.

Each participant was asked to come prepared with ideas for a resource based on their research interest, which could be used as an outreach tool for public engagement. The scope of proposed ideas was overwhelming, ranging from health education workshops on the ecology of infectious diseases in rural areas of Tanzania, public engagement activities to promote the conservation of cave-dwelling bats, to role-playing games to demonstrate to primary school pupils how immune cells interact to fight infection.

During the workshop, attendees were shown interactive ways to develop and deliver their ideas and feel more confident to engage with broader audiences. And, most importantly, they were shown examples of how not to communicate science, so that certain pitfalls can be avoided. The training day proved to be very successful, with almost twice as many applications as available places. Comments from the attendees include:

"The workshop allowed me to see for the first time the level at which I should be aiming a presentation or scientific demonstration at for a public audience – with the emphasis on it being fun and interesting and not just a rant about my last year's worth of research."

"I now feel that I could take ideas gained from the workshop to schools or science open days which I wasn't confident about doing before."

"The workshop highlighted to me how very simple experiments can be mind-blowingly good."

The Biochemical Society is partnering with the Society for Experimental Biology and the British Ecological Society to organize a similar training day this year, on 7 June 2012 in London. The programme will incorporate a variety of aspects of science communication including public outreach activities, social media and science writing. Experts working within these fields will be at hand to support attendees with the development of their ideas, and to provide useful tips on how to engage an audience. For more information and to apply, visit www.biochemistry.org/Courses. ■



2011 Science Communication Training Day – practical science demonstration by Jo Foo, Science Education Co-ordinator at the Glasgow Science Centre