

# Careers in journalism can be rewarding for scientists who have a way with words. Virginia Gewin reveals what it takes to be a scribe.

If you love science but hate lab work, trading the monotony of running gels for the creative buzz of writing may sound appealing. But before you abandon the bench and grab your laptop, make sure you understand the odds and options ahead. A staff position as a science journalist is as rare as it is coveted. In fact, many more opportunities exist for public information officers or freelance writers. Whatever the position, the ability to communicate is the common denominator.

People who write about science for a living fall into two broad categories. “There’s science journalism and science writing, and those are two different things,” says Deb Blum, president of the US National Association of Science Writers (NASW), which promotes both roles. Of the 2,300 members in the NASW, some 1,400 are journalists — only 500 of whom have staff positions. The remaining 900 members are science writers working as public information officers at universities, government science agencies or research institutions. These public relations (PR) positions are stable, well-paid jobs that can allow writers to hone their skills, and can still lead to journalistic pursuits.

## THE JOURNALISTIC ANGLE

After years of a depressed market around the world, Blum says that journalism is undergoing a revival that reflects an upturn in US advertising dollars. But staff journalism jobs are, by nature, rare, and you can count on stiff competition for the few permanent positions at newspapers and magazines. “There may be 40 to 50 formal science correspondents for high-powered, high-ranking UK newspapers or television,” says Toby Murcott, a freelance science journalist in the United Kingdom. But a university will typically have more science writers than the relatively few magazines and newspapers that employ such specialists.

Although journalism is on an upswing in the United States, this effect has yet to cross the Atlantic. The global economic crisis continues to suppress advertising. “The biggest newspaper in Denmark had a very popular science section, but cut it away because there were no adverts in it,” says Jens Degett, director of the European Science Foundation’s Communication and Information Unit.

In Germany, editors solved the advertising crisis by sacking the staff. Now, 80% of the country’s science

journalists are freelancers, according to Hanns Neubert, vice-president of the umbrella organization the European Union of Science Journalists’ Associations.

The numbers don’t lie. Freelancers are the mainstay of science journalism. But Neubert and Blum agree that successful freelancers navigate the rocky waters by doing one thing — networking. “Network, network, network and then do some networking,” says Murcott. Blum cautions that the world of science journalism is very small. Much more than in many other professions, careers are built on who you know. The hurdle is getting to know the elusive editors.

In the United States, the would-be science journalist should consider attending the annual American Association for the Advancement of Science (AAAS) meeting. Editors typically trawl the February meeting for new writing talent, and the NASW piggybacks its annual conference with the AAAS meeting.

A number of editors and institutions conduct interviews for internships at the AAAS meeting. “I wasn’t aware that Fermilab offered internships before I went to the AAAS meeting,” says Davide Castelvecchi, an aspiring Italian science journalist and one of this year’s four science-writing interns at the accelerator lab in Batavia, Illinois.

## TACKLING PUBLIC RELATIONS

Proving that writing skill is at the heart of both PR and journalism, Castelvecchi is using examples of his work at Fermilab to apply for jobs and internships in both sectors. The common denominator is communicating science in an accurate yet compelling way — an intangible skill that plays no part in obtaining a PhD.

Odds are that he will find the higher-paying job



“Don’t do this just because you can’t find something else, it is difficult to survive.”

Jens Degett, head of communication for the European Science Foundation.

## Advice from the pros

“One thing you have to do the minute you walk into a science-writing programme is build your portfolio. You want to graduate as some kind of known quantity.” — Deb Blum, president, National Association of Science Writers

“I’d counsel reporters to do more reporting — flush out details that make a story sing.” — Steve Pelletier, editor, *HHMI Bulletin*

“Perhaps the most practical advice specific to freelancers is this: have a partner with a day job and benefits.” — Deb Blum



**“People shouldn’t make the mistake of thinking that becoming a science journalist is easier than becoming a scientist”**  
**John Wilkes, director of the science-communication programme at the University of California, Santa Cruz.**

with an institution or university. In the United States, the drive for media attention has reached unprecedented levels. So much so, according to Blum, that the bulk of science-writing jobs are now with institutions.

Although many point to a deep divide between science journalism and PR, Michel Claessens, head of communications for the European Commission’s Research Directorate-General, notes that there are quite a few similarities. “Doing science PR at the commission is not fundamentally different from journalism,” he says.

“We have to identify good stories, provide new messages and conduct interviews.”

But high-profile magazines are increasingly being published by institutions. These outlets allow writers to display their talent for narrative — a quality any editor appreciates. As much as 75% of the content of magazines produced by institutions such as the Howard Hughes Medical Institute in Maryland and Fermilab is written by freelancers. In addition, these jobs can lead to special projects routinely farmed out to specialized writers. “We freelance a great number of projects including features on the website, some

news stories for the website, and special projects, such as reports or books,” says *HHMI Bulletin* editor Steve Pelletier.

Europe is just beginning to attain the level of media relations that US institutions have honed. “Being media savvy is rather new over here,” says Beate Kittl, science editor at Switzerland’s *Facts* magazine. “It’s really just happened at the government and university levels in the past five years.” In fact, Kittl has trouble keeping good freelancers because they are attracted to the better-paid, steady work of the emerging PR positions.

#### TRAINING OPPORTUNITIES

There is no substitute for ‘clips’ — published proof of your abilities — in the world of science writing. But, here’s the catch-22. “Editors are happy to publish you if you’ve already been published,” says Blum.

“Editors are less willing than ever to take a chance on an unknown person,” says John Wilkes, director of the science-communication programme at the University of California, Santa Cruz. “You almost have to come out of one of the best programmes to be eligible at the best internship sites.”

Fortunately, advanced degree courses in science communication are beginning to crop up all over the world. In addition to the ten students accepted into Wilkes’s programme each year, students will find MS courses at Boston University, Johns Hopkins University, and just recently the Massachusetts Institute of Technology. In Europe, Britain tends to lead the way, but such programmes exist in most European countries (see Web Links).

The Wellcome Trust in the United Kingdom, in conjunction with the Association of British Science Writers, funds seven bursaries for students interested in science journalism. The various science-writing associations are the best resources for professional development, often offering fellowships, short courses and seminars.

For those seeking a more direct route with hands-on experience, Wilkes suggests writing for a small, local newspaper in any way possible. Gail Cardew of the Royal Institution of Great Britain recommends that graduate students try contacting a science PR office, for example within a university, research council or science-communication organization. “They would then gain experience both in how the media works and, if their special interest was in writing, composing press releases,” she says.

In the United States, summer fellowships and programmes can help you get a foot in the door. For example, the AAAS Mass Media Fellowship available to PhD students is a great way to make the right connections. “Over the past 30 years, almost half of our 450 fellows have remained in science journalism in some way,” says Judy Kass, project director of the fellowship. “Given the immediate impact that cutting-edge science has on our lives today, it is increasingly important to communicate research findings to the public.”

If there’s a half-decent writer inside you fighting to get out, you will succeed. “There are a lot of people wanting to get into this peculiar business,” says Murcott. “If you can do it, you will survive. The only way to find out is to try.”

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#### Web links

- University of California, Santa Cruz
- ♦ [scicom.ucsc.edu](http://scicom.ucsc.edu)
- Johns Hopkins University
- ♦ [www.jhu.edu/~writsem/sciwrit/index.html](http://www.jhu.edu/~writsem/sciwrit/index.html)
- Boston University
- ♦ [www.bu.edu/com/jo/science/ms\\_txt.htm](http://www.bu.edu/com/jo/science/ms_txt.htm)
- Massachusetts Institute of Technology
- ♦ [web.mit.edu/sciwrite](http://web.mit.edu/sciwrite)
- AAAS Mass Media Fellow Program
- ♦ [ehrweb.aaas.org/massmedia.htm](http://ehrweb.aaas.org/massmedia.htm)
- Santa Fe Science-Writing Workshop
- ♦ [sciwrite.org/sciwrite/sciwrite.html](http://sciwrite.org/sciwrite/sciwrite.html)
- Association of British Science Writers bursaries
- ♦ [www.absw.org.uk/bursaries.htm](http://www.absw.org.uk/bursaries.htm)
- Imperial College London
- ♦ [www.scicom.hu.ic.ac.uk/Welcome.html](http://www.scicom.hu.ic.ac.uk/Welcome.html)
- University of the West of England
- ♦ [www.uwe.ac.uk/fas/courses/environment/mscscicomm.html](http://www.uwe.ac.uk/fas/courses/environment/mscscicomm.html)
- Higher Journalism School, Lille
- ♦ [www.esj-lille.fr](http://www.esj-lille.fr)
- Free University Berlin
- ♦ [www.kommwiss.fu-berlin.de/wissjour.html](http://www.kommwiss.fu-berlin.de/wissjour.html)
- University of Milan
- ♦ [users.unimi.it/%7Eespharm/conscient/index.htm](http://users.unimi.it/%7Eespharm/conscient/index.htm)
- International School for Advanced Studies, Trieste
- ♦ [mcs.sissa.it](http://mcs.sissa.it)
- Umeå University
- ♦ [www.umu.se/kultmed/utbildning/vj/index.html](http://www.umu.se/kultmed/utbildning/vj/index.html)