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## Science through Words

So you want to be in science writing. How do you get started? The good news is that you already have: writing and critical thinking are integral to the effective scientist, so you are already no doubt honing the necessary skills to be a science writer. The transition from doing research to writing about research can be as easy or as complicated as you like, whether you just launch into it, or prefer to try an internship, or assemble more official credentials.

You may not initially have a fluid writing style or even, perhaps, fluent English. But your writing will improve with practice and in response to continued critique: take every opportunity to write, and be receptive to critiques of your writing. And, if English is not your most fluent language, consider that there are opportunities for science writing in other languages, as well as a particular niche for writers who understand technical topics and can bridge linguistic and cultural complexities.

A good way to develop your skills is to offer short articles for the general public to your local newspaper or your university's alumni magazine. Small projects fit in around your research and might help you get a feel for whether or not you enjoy science writing.

There are also organized opportunities to enter the field. The American Association for the Advancement of Science (AAAS) offers a summer fellowship suitable for graduate students or postdocs to immerse themselves at places such as *The Chicago Tribune* or National Public

Radio. The week-long Santa Fe science writing workshop brings aspiring and actual science writers together, so that prospective writers can enjoy expert critiques of their writing as well as get to know some leading science writers. The year-long science writing program at the University of California, Santa Cruz takes those with a science background and develops their skills in writing and editing through coursework and internships.

A switch from bench research to science journalism may result in changes in the way in which you feel about ownership of your work. You will now be talking not about your own research results, but rather about results

that other scientists have produced. However, it will be up to you to identify a topic that might be worth watching and to develop your informational resources, whether through a first-hand experience with a dive in a deep-sea submersible or with a world-wide network of reliable scientific contacts. Ultimately, your output will be how you bring the story together, from background research to the final text.

A sense of how science works and what it is like to be a scientist will give a solid foundation to your articles. You will likely address a much broader variety of topics than you would have as a researcher, so unbridled curiosity

and being able to get up to speed quickly on a new topic will serve you well.

Writers might pitch, develop, and write stories for newspapers, radio, television, for a

### Organizations for science writers and editors

- National Association of Science Writers  
<http://www.nasw.org/>
- Council for Science Editors  
<http://www.councilscienceeditors.org/>
- Society for Scholarly Publishing  
<http://www.sspnet.org>
- European Association of Science Editors  
<http://www.ease.org.uk/>
- Society for Technical Communication  
<http://stc.org/>

### Workshops, classes, programs in science writing

- PSP Journals Boot Camp  
<http://www.pspcentral.org/>
- Stanford Professional Publishing Course  
<http://publishingcourses.stanford.edu/>
- AAAS Mass Media Fellowships  
<http://www.aaas.org/programs/education/MassMedia/>
- UC-Santa Cruz Science Writing  
<http://scicom.ucsc.edu/SciWriting.html>
- Santa Fe Science-Writing Workshop  
<http://sciwrite.org/>

### Resource for science writers

- AAAS Press Room  
[http://www.aaas.org/news/press\\_room/](http://www.aaas.org/news/press_room/)

university press office, for the newsy sections at the front of various scientific research journals. Editors might edit others' writing, applying red-pen (or more likely these days, "track changes" on the computer file) to text. These edits might concern word usage, but are also likely to address organization, missing arguments, hyperbolic statements, or other issues of quality, content, and style.

Copyeditors may tend to focus more on grammar, spelling, punctuation, and sentence structure. And, there are those who research how science communication happens, in departments of technical communication or schools of information science.

Editors decide what content pieces are chosen to make up the whole web site, or magazine, or newspaper section. Thus 'editor' means much more than marking up others' work—it also includes filtering an onslaught of information (or submitted articles, or story proposals) to decide what pieces together make an effective publication. If the parent organization has

unique goals for its publication, as an advocacy group might have for its web site, the editor is key to accomplishing these goals.

Science writing may be a less predictable career than is academic science. This does not suggest absence of employment, but rather that the road map can be non-linear. Science writers or editors have gone on to positions as diverse as executive director for a non-profit scientific association, or organizer of scientific meetings and workshop programs. Science writing itself may include cultures as different as book publishing, working for a zoo or aquarium, or working freelance from home.

What exciting new research is just around the corner? What is the nitty gritty of how it works? How does it fit into the larger context of policy and societal implications? And how can I possibly explain all of that to a non-expert audience in 800 words or less, due tomorrow? Such is the challenge for the science writer. ■

—Pamela J. Hines

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