

Science Educator to Science Writer: a Personal Voyage

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Many years ago I heard Gloria Lubkin, now retired editor of *Physics Today*; give a talk about women in the sciences. In telling us about her career, Ms. Lubkin said she had interrupted her graduate work in nuclear physics to become an associate editor at *Physics Today*. I remember thinking, “How could she do that? How could she give up a Ph.D. in nuclear physics just to work at a magazine?” It didn’t take me long to realize she hadn’t given up anything. Ms. Lubkin had the coolest job on the planet!

Well, I guess I am a little slow. It took nearly 25 years before I was ready to act on that teachable moment. My gradual transition from scientist and science educator to freelance writer and English Department lecturer is a long story, but I am pleased to say that ASM played an important role in helping it happen.

Perhaps some of you remember *Souvenirs*, a web-based case study I wrote with Ethel Stanley (BioQUEST) and Janet Decker (University of Arizona). In addition to having a great time writing with these two women, *Souvenirs* resulted in numerous spin-off publications and even a few speaking engagements. It was also “the clip” that clinched my first paying freelance job.

On a whim, I responded to an American Society of Radiologic Technologists advertisement for freelancers to write continuing medical education (CME) documents for their members. With nothing to lose, I sent them my resume and a few published clips.

The resulting interview was interesting. While the director was pleased to hear that I had teaching experience, he hoped that I didn’t write like a scientist. *Souvenirs* and the other publications helped alleviate his fears. He then asked me what I knew about medical imaging. In my usual uncensored style I said, “Not a thing.”

I got the job! In fact, I still write for them. Only now, I can just as honestly say, “I know many things about medical imaging.”

Yes, this was a fortunate string of events, but barring similar serendipitous happenings, how does a scientist break into the writing profession?

I don’t believe there is a formula—but I will tell you what often I tell my students. Find unpaid writing opportunities on campus or even a paid summer internship with a newspaper, magazine, professional organization, or with one of the national laboratories. Doing this will improve your writing skills, give you practical experience, and help you to build the writing portfolio you need to show prospective clients.

Participate in writing workshops and seminars. Attending these relatively informal events is an opportunity to learn from the experts. It will also give you the chance to talk to other science writers—beginners and Pulitzer Prize winners alike—and to develop professional contacts.

I can highly recommend the Santa Fe Science Writing Workshop held every summer in Santa Fe, New Mexico (<http://sciwrite.org/>). The year I attended, my mentors were Richard Harris of National Public Radio and Lori Garrett, the author of the *Coming Plague*. George Johnson and Sandra Blakeslee, science writers for the *New York Times*, run this program.

Professional writing organizations such as the National Association of Science Writers, Society for Technical Communication, American Medical Writers Association, American Healthcare Journalists, and the Society of Environmental Journalists are another wonderful resource for both “want-to-be” and established writers. In addition to annual conferences, local chapters often sponsor monthly meetings and workshops. Though some of these organizations limit membership to professionals, all provide accessible and helpful information on their websites.

It might seem obvious, but reading and writing really do go together. Reading will help you discover the kind of writing that best compliments your style and interests. In addition to books, magazines, and newspapers, read public information releases, patient information brochures, and government publications such as those published by the Centers for Disease Control and Prevention, National Aeronautics and Space Administration, U.S. Department of Agriculture, or the Food and Drug Administration.

It is also important to write. In the process, you will quickly discover that writing for the public is different than writing for microbiologists or other professional audiences. Translating science into a compelling narrative is an artful process that involves respecting and understanding what your audience wants to know. Tone is another important difference between these two genres. For example, an enthusiastic and personable tone helps readers engage with and understand an article on a complex topic such as cave geomicrobiology. Under these circumstances, use familiar words in the place of scientific jargon. Using personal pronouns such as “you” and “yours” is another helpful tactic. Writing in the active voice is another distinguishing characteristic of this type of writing.

While many people romanticize the freelance lifestyle, it does have its challenges. First of all, you have to find your own work! Using the Internet or the phonebook yellow pages to find companies and organizations to contact is often a good way to get started. You can also mention to your friends that you are looking for writing jobs or call your college publications office and pitch an idea for the alumni magazine. As you can see, opportunities for finding work are limited only by your imagination and stamina for making “cold calls” and following up on leads.

Pace and workload are other important considerations. Do not take more work than you can handle. Missing a deadline is similar to breaking a contract. And just like having a bad credit rating, you want to avoid getting yourself in this situation.

Work pace is also a quality of life issue. When I first started in the freelance business, I constantly worried about creating, finding, or landing the next job. In combination with meeting the deadline for the work at hand, this underlying concern made things feel stressful and frenetic. Even when self-employed, protecting your personal and family time can be difficult.

It surprises me to discover that I have been freelancing for nearly 10 years. The time went quickly. Freelance writing has taken me throughout the United States and Europe to interview interesting (and sometimes famous) people, to observe surgeries, and to visit wastewater treatment facilities, research laboratories, wineries, cheese caves, cyclotrons, and other fascinatingly strange places. A European Initiative for the Communication of Science fellowship

and a Fulbright Senior Specialist fellowship have been sources of intellectual and collegial enrichment.

Sometimes old friends and colleagues ask me how this all happened. Some are actually worried about what appears to be an abrupt lifestyle change. Others are just curious and wonder why. To those who profess concern, I tell them about Gloria Lubkin. I tell them how the previous 25 years prepared me for this new stage in my career. To my curious friends, I simply say “you gotta follow your heart.”