

## TRADE TALK

# Medical liaison



**David Crosby** explains his route from a PhD and postdoctorate in virology to a job educating health-care providers about hepatitis medicines for global drug-maker Bristol-Myers Squibb.

### What is a medical-science liaison (MSL)?

My role is to work with medical doctors, nurse practitioners and others to make sure that our products are being used properly in the relevant patient population. I'm a conduit. I take information about drugs from the home office and give it to physicians and other clinicians, and I take feedback from the providers and bring it back to the home office. Unlike for the sales team, an MSL's performance, goals and metrics cannot in any way be tethered to the company's commercial performance, incentives or goals. That way, I avoid conflicts of interest.

### How did you research the position?

I knew that there would be a lot of travel and cold calling — reaching out to total strangers and finding a way to get them to talk, establishing relationships with people I didn't know at all. But I had no prior experience with that. So to get some experience, I became a LinkedIn addict. I searched for MSLs, starting with virologists and companies that have a home base in the San Francisco Bay Area in California. From there, I tried to find people who had something in common with me, such as a school or a location. I'd reach out and talk to them. The more I did it, the more confident I got.

### Did you ever trip up?

I interviewed for a company that wanted me to give a scientific talk, and right then and there I learned that what physicians think is a scientific talk differs a lot from what I, coming from basic research, think is a science talk. It was a train wreck — but I learned from all the train wrecks.

### Do you have any advice for job seekers?

Too many postdocs settle. They think, 'It may not be something that I really love, but at least it's bench science.' It's just really important to keep an open mind about what you can do with your experience and aptitude. Talk to anyone and everyone about what they do. ■

### INTERVIEW BY MONYA BAKER

This interview has been edited for length and clarity; see [go.nature.com/xehv4h](http://go.nature.com/xehv4h) for more.

DAVID CROSBY

Researcher-writers should keep in mind that education is not the main purpose of fiction. Technical details should be included only if the reader needs them to understand the story, not simply because the author finds them fascinating. For *The Martian*, Weir went to great lengths to ensure accuracy, and even performed orbital-dynamics calculations. But he left out how he came up with certain numbers, such as the mass that had to be removed from the ship to achieve escape velocity.

When technical information is necessary, writers should try to deliver it in a way that sounds natural. "People don't tell each other a whole bunch of information about particle physics when they're having breakfast together," says Goldschmidt. Instead, she tries to make the science an organic part of the character's personal journey. In the Oppenheimer story, the physicist thinks about an experiment that he is trying to replicate, but the details are woven into his emotional turmoil at failing to complete it.

Humour can help to lighten the tone. *The Martian's* protagonist is a smart-aleck, and his jokes break up the expository text. In one section, he says that if he were exposed to damaging solar radiation, he would "get so much cancer, the cancer would have cancer".

### THE PATH TO PRESS

Many outlets accept short-story submissions. LabLit.com often publishes fiction by scientists, although it does not pay them because it is a volunteer effort. *Nature* runs an 850- to 950-word science-fiction story each week (see [nature.com/futures](http://nature.com/futures)). The website Duotrope.com offers a searchable database of literary journals and other fiction markets around the world, and writers can peruse newsstands for sci-fi magazines such as *Analog Science Fiction and Fact*.

For longer works, small presses are a more-realistic option than major publishers, and many do not require writers to have agents. Tasneem Zehra Husain, a theoretical physicist and writer in Cambridge, Massachusetts, wrote a novel that revisits physics breakthroughs throughout history from the perspectives of fictional characters. Through an acquaintance, she connected with the publisher Paul Dry Books in Philadelphia, Pennsylvania, which released her book *Only the Longest Threads* last year. To find small presses, scientists can look for companies that have published similar books. Alternatively, authors could self-publish using a service such as Lulu.

Many literary journals do not pay at all, and Reynolds estimates that science-fiction magazines have paid him an average of only US\$200–300 per story. But the contacts that Reynolds made through short-story publishing led to a book deal, and he published

four novels while working as an astronomer. By the time he quit science to become a full-time writer, he was making about \$60,000–\$75,000 per year from book sales.

### THE WRITE BALANCE

Few scientists can expect to make a living — or earn much — from their fiction. But money often isn't the main motivation. Caplan, for his part, wanted to bring attention to the challenges faced by the family members of people with bipolar disorder (challenges he himself has experienced) and to provide entertainment for scientists. He also finds that writing fiction clears his head, in the same way that playing a sport might do for others (see *Nature* 523, 117–119; 2015). "It's almost like a form of meditation," says Caplan. "It just keeps me sane." And there are other rewards. Scientists have a chance to reach people who might not read a non-fiction science book or visit a natural-history museum — but who might read a love story about ecologists in an exotic field location. And readers might be inspired to look up the science once they've finished.

There can also be a cross-training effect. Rohn thinks that her fiction has helped her to get more grants; reviewers have commented that her proposals are beautifully written. The craft of telling a story applies to scientific papers as well; in hers, for example, she lays out the phenomenon that her team noticed, the questions it raised and what they did to try to answer those questions. "Everybody wants to hear a story," she says.

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working part-time, and says that she could not have done so with a full-time job because the novel required extensive historical research.

Scientist-authors also risk having their fiction perceived as a distraction by promotion committees. Husain worried that her novel might affect her career prospects. But she has received positive feedback on the book from other physicists, including prominent researchers whose fields are described in her book.

For researchers who delve into fiction writing, the act of creating a world, characters and stories can be intensely rewarding. When the writing is flowing, says Rohn, "it's like being caught up in the best book you've ever read". ■

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