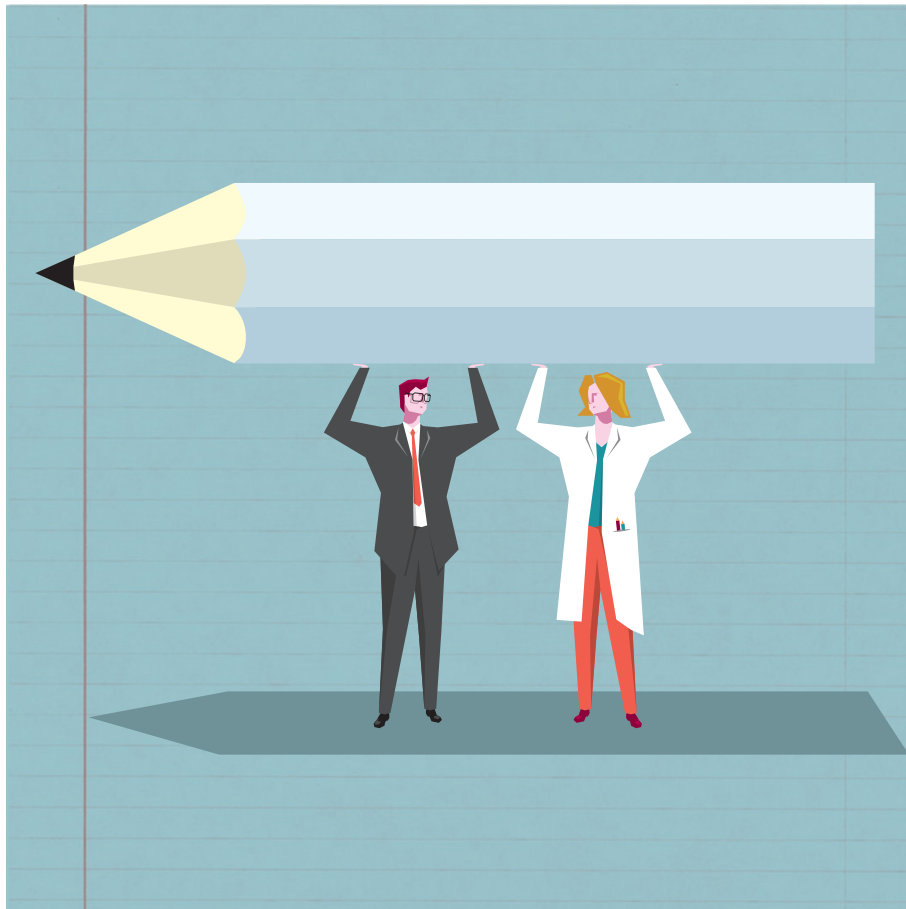


# CAREERS

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ADAPTED FROM HONG LIU/GETTY

Then, at a conference, the pair met Dan Ariely, a best-selling author and a behavioural economist at Duke University in Durham, North Carolina. He introduced them to his literary agent — who, in turn, suggested that they work with freelance science writer Sandra Blakeslee, who had co-authored several books, including one with a noted neuroscientist.

The three hashed out a plan for a book about the neuroscience of magic, and the proposal garnered interest from more than a dozen publishers. The team eventually went with Henry Holt and Company (part of Macmillan Publishers, which owns *Nature*). Over the next 9 months, the scientists wrote 500- to 2,000-word chunks and sent them to Blakeslee, who pushed for clearer explanations, revised the text, wrote additional sections and assembled the vignettes.

The result — *Sleights of Mind: What the Neuroscience of Magic Reveals About Our Everyday Deceptions* — hit the shelves in 2010. Although not a huge commercial success in the United States, it sold well in the United Kingdom and Spain, led to more speaking engagements for the scientists and won positive reviews and an award. Their confidence boosted, they are now on book number two.

Many scientists eager to write a book similarly wonder if they can do it on their own. Partnering with a professional writer, often a science journalist, can ease the pressure and vastly improve the manuscript. Writers can help to translate complex concepts for the public, construct compelling narratives and organize tens of thousands of words into a clear structure. Many also do a good deal of the required research. And the use of a co-author can also motivate the scientist to meet deadlines.

## GOOD WITH THE BAD

But co-authorship comes with challenges. The scientist will not necessarily save time: working with writers requires extensive discussions and review of many drafts. The co-authors may disagree on what phrasing or details to include. And a skilled co-author is not cheap: the writer usually expects a flat fee (which can run as high as a couple of hundred thousand dollars), a share of payments from the publisher, or both. Still, it can be a rewarding — if not highly remunerative — experience. To best protect their interests and to streamline and smooth the process, scientists who aim to pursue this route should seek an experienced writer with a compatible personality, explicitly plan the

## AUTHORSHIP

# Dynamic duos

*Partnering with a writer on a book can bring literary panache to scientific stories.*

BY ROBERTA KWOK

If any researchers ever seemed well-equipped to write a popular book, they would be neuroscientists Stephen Macknik and Susana Martinez-Conde. Ten years ago, the husband-wife team launched the ‘Best Illusion of the Year Contest’, which honours magic tricks and other perceptual illusions. In 2007–08, they wrote two feature articles for *Scientific American* and started a monthly online column there about the neuroscience

of illusions. A few publishing companies took note and contacted the pair about writing a book.

But Macknik and Martinez-Conde, now at the State University of New York Downstate Medical Center in Brooklyn, were hesitant. They felt comfortable producing 2,000-word articles, but the idea of writing 8,000-word chapters, braiding multiple narratives and developing an overarching structure was intimidating. “We didn’t know if we could handle a book,” says Macknik.

► schedule and division of labour before the project begins, consider the pros and cons of sharing a literary agent and line up a lawyer to review the contract.

### STRONG STARTS

If the scientist brings a co-author on board early, the writer can help to prepare a marketable book proposal and craft an enticing sample chapter. Usually, a writer charges about US\$5,000–10,000 for this work, which can take a few months. Although some researchers may hesitate to invest that amount up front, the ultimate deal — and amount of the advance — hinge on a strong proposal. “It’s what will sell the book,” says Blakeslee.

To find a co-author, scientists can contact journalists who have interviewed them, written about similar topics or been recommended by colleagues. Whether candidates must have experience in writing books is debatable — Blakeslee believes that it is not essential, but Macknik argues that since the project will be time-consuming and risky, scientists should seek writers with a strong track record in book authorship.

If the scientist’s first choices are not available, those writers can often recommend others, says Thomas Hayden, a science

communication lecturer at Stanford University in California who has co-authored two books. Researchers can also post ads with writers’ organizations, such as the US National Association of Science Writers ([www.nasw.org](http://www.nasw.org)) or the Association of British Science Writers ([www.absw.org.uk](http://www.absw.org.uk)). Blakeslee recommends that a would-be scientist-author interview four or five candidates face to face, look for a good personality fit and evaluate samples of their work for accuracy and flair. It will not be clear how heavily the writer’s work was revised by an editor, but an interview will help the scientist to gauge the candidate’s intelligence and capabilities.

The writer with the most recognizable name is not always the best choice, says Hayden. Instead, the scientist should consider whether the writer asked thought-provoking questions during their meeting or previous interviews. “You want somebody who can go as deep as you can into the material,” he says.

Scientist and writer also should agree on the approach to the subject. That was important to David Spiegelhalter, a statistician at the University of Cambridge, UK, who co-wrote *The Norm Chronicles* (Profile, 2013), a book about risk assessment in everyday life. He and his co-author, UK journalist Michael

Blastland, had previously given joint lectures about how to communicate statistics and shared the view that experts should not belittle the public’s understanding of risk. So when the two decided to write a book together, they knew that they agreed on an approach: both wanted to respect readers’ gut feelings about risk but to help them to balance instinct and analytical thinking. The collaboration was smooth, and the book won acclaim for its avoidance of a patronizing tone.

The scientist will also need to find an agent (who typically takes a 15% commission on payments from the publisher). To find one, they can search the acknowledgements pages of similar books or ask scientist-authors for recommendations. The website Publishers Marketplace sells reports about which agents have recently sold books, including those on science, around the world.

Sharing an agent with the co-author can simplify matters by reducing negotiation time and the number of people involved in decisions — but it also carries risks. If the relationship later falls apart, the agent is likely to take the side of the most important client, which might be the writer, says Madeleine Morel, a literary agent at 2M Communications in New York City. The scientist should also retain a lawyer who specializes in publishing to review the collaboration contract, which should spell out issues such as payment (see ‘Dividing the spoils’), cover credits, division of labour and deadlines.

Once the contract and book deal are in place, the real work begins. Sometimes, the scientist provides most of the ideas and resources for content — such as the subtopics each chapter should cover, lists of studies, articles or videos of lectures. And the writer may spend many hours interviewing the scientist to learn key concepts and gather anecdotes.

But the division of labour varies widely, and writers, too, can bring scientific expertise to the collaboration. Blakeslee had more than two decades of experience covering brain science when she began working with Macknik and Martinez-Conde, and she was more familiar with some neuroscience concepts — such as peripersonal space, the space around our bodies that can be reached by our arms — than the scientists were. Because following the news is part of a journalist’s job, the writer may also be better at keeping up with the latest research in the field. This skill impressed Douglas Emlen, an evolutionary biologist at the University of Montana in Missoula, during his collaboration on the textbook *Evolution: Making Sense of Life* (Roberts, 2012) with Carl Zimmer, a science writer in Guilford, Connecticut. “He brings examples to the table that never in a million years would I even be aware of,” says Emlen.

## FINANCIAL DECISIONS

### Dividing the spoils

Several types of payment scheme are possible for co-authored books. The writer’s portion will depend on his or her level of experience, the project’s complexity, the division of labour and the book’s expected sales. Scientists also should keep in mind that freelance writers do not receive a separate salary — they live on what they earn from their writing.

“This is what pays the mortgage,” says Catherine Dold, a freelance science and health writer in Boulder, Colorado, who spent 14 months working full-time on a co-authored book. “You can’t expect them to do it on the side, or just for the glory of it.”

Some writers charge a flat fee, which typically ranges from US\$40,000 to \$200,000; the researcher often pays the fee out of the advance or from a grant. Other co-authors ask for a percentage of payments from the publisher, and the writer’s share is usually 30–50% of the advance and 15–50% of royalties.

A hybrid approach that combines a flat fee with a share of payments from the publisher often sets up the best working



relationship, says Thomas Hayden, a science communication lecturer at Stanford University in California.

A writer who receives only a percentage of the advance and royalties may want to sell the book to the highest bidder, but the scientist might prefer a more prestigious publishing house with

a lower offer. And writers who receive only a flat fee may feel less motivated to help with marketing — by promoting the book on social media, for instance, or asking journalists in their network to review the book.

Generally, the less credit the writer receives, the higher the fee. A writer may charge more if his or her name appears in smaller type on the cover than the scientist’s or is not mentioned on the cover at all (for a ghostwritten book) than if all co-authors receive equal billing. A young journalist who is eager to write a first book might offer a discount in exchange for cover credit. But seasoned writers with several books under their belts may not value credit as highly and will want a larger slice of the financial pie. **R.K.**

Yet even if the journalist is responsible for all the writing, a scientist cannot expect him or her to produce a book alone. “It doesn’t happen by magic,” says Catherine Dold, a freelance science and health writer in Boulder, Colorado. In addition to interviewing the scientist for concepts and anecdotes, the writer will need frequent feedback on chapters. Blakeslee recommends that the co-authors meet in person regularly to work on the book, maintain rapport and ensure clear communication. If the scientist weighs in only at the end, the writer may focus on points that the scientist would not have chosen to highlight, or might neglect areas that the scientist considers important.

It is also crucial to stick to the schedule because book-publishing schedules tend to be less flexible than those many scientists are used to. If one partner falls behind, the other team member or members may have trouble adjusting their schedule. And the publisher may cancel the book if the manuscript is late. Spiegelhalter found that having a co-author made him less likely to procrastinate.

“You’ve just got to get on with it,” he says. “Teamwork is very effective at driving it along.”

Researchers should expect disagreements to arise, especially over wording or the appropriate level of technical detail. They must ensure that the text is accurate, but should also recognize the writer’s expertise in communicating to a lay audience. Writing engaging chapters that would maintain a reader’s attention “required shattering a lot of the conventions that I’m comfortable with,” says Emlen. Zimmer used more active verbs and shorter sentences than Emlen was used to, for example.

But if the scientist begins to feel that the relationship is foundering, it is better to terminate sooner than later, says Morel. The collaboration agreement should contain a termination clause that specifies what will happen if the partnership dissolves. The scientist might keep the copyright to the text, for example, while the writer keeps any payment received so far.

Well-matched co-authors can avoid such pitfalls. Emlen says that it was “a dream” to work with Zimmer on the evolution textbook: Emlen provided deep background knowledge of the field, and Zimmer conveyed the material with compelling stories and clean, accessible language. “I spent a lot of the past few years realizing just how hard it is to write like that,” says Emlen. At the end of the day, whatever the bumps along the way, both parties want the same thing: to write a great book. “You’re in this together,” says Blakeslee. ■

**Roberta Kwok** is a freelance science writer in Seattle, Washington.

## TURNING POINT

# Danielle Edwards



*Evolutionary biologist Danielle Edwards faced a difficult choice last autumn. She could either accept a prestigious 3-year Discovery Early Career Researcher Award (DECRA) from the Australian Research Council and return to her home country or she could continue her efforts to secure tenure-track positions for herself and her husband at the University of California (UC) Merced. She chose the latter.*

### **You grew up in Australia. Is it still the site of your fieldwork?**

Yes, I maintain some research on Australian reptiles. I grew up north of Sydney with a national forest as my back yard. After exploring the reproductive biology of amphibians as an undergraduate at the University of Newcastle, Australia, I did a PhD at the University of Western Australia in Perth studying how environmental processes drive patterns of speciation in this biodiversity hotspot. I then spent more than five years in the United States studying Galapagos tortoises, but still do work on Australian reptiles and continue to expand my collaborations around the world.

### **Why did you move to the United States?**

I never thought I would leave Australia. In 2009, I finished a postdoc at the Australian National University in Canberra. When that funding ran out, I tried for other grants in Australia, but was unsuccessful, so I took an offer for a postdoc at the University of Michigan. My now-husband eventually joined me a year later, and by 2011, we had both secured postdocs at Yale University in New Haven, Connecticut.

### **Did you look for permanent jobs in Australia?**

Yes, since 2010. I applied for pretty much every Australian job I could — but, given the dismal state of funding in Australia, I was applying for US positions too. I’ve been interviewed several times for US jobs, and made it onto many

short lists — but could not do the same in Australia, where the odds are even worse than in the United States. In early 2013, I was ready to give up on academia. I was in my mid-30s, and wanted to have a child and settle down. When I applied for the DECRA, I had lots of US applications out. I was interviewed last May at UC Merced, and got the job offer a few days later. Last October, I found out I got the DECRA.

### **How did you respond?**

When the DECRA came through, I was in a state of shock — I never thought I would get it. It was a huge thing for my family when I moved to the United States, especially once we learned that I am expecting our first child in April. Finding out about the award was an emotional time. On the one hand, we had an opportunity to go back to Australia where I would be able to raise my child near my extended family. On the other hand, UC Merced was in the process of interviewing my husband for a tenure-track faculty position, which he will begin this summer. However, we felt that there was no opportunity for long-term employment for us in Australia — particularly for both of us in the same place. Australian universities are struggling under funding cuts and only one has a spousal-hire policy. I never really felt that I had the option to take the DECRA.

### **Your declining the DECRA made headlines. What was that like?**

Honestly, it’s a bit weird. There was a misperception that I had turned down the DECRA in protest, but it was much more complex than that. There were ten DECRA offers in evolutionary biology last year, but there were only three permanent academic positions in the field. If this grant is designed to keep or bring bright minds to Australia, there are no follow-on funding opportunities. Several people wrote to thank me for raising awareness about Australia’s funding situation.

### **Do you hope to make it back to Australia?**

I wouldn’t rule it out, but I’m deeply committed to my new institution. We’ve landed in a pretty idyllic place. We’ll be able to afford to buy property and raise our child the way we grew up — something we wouldn’t be able to do in Australia. Plus, UC Merced is assembling a great group of people with a spectacular gender balance. I feel very positive about my decision and happy that I now have a direction. ■

INTERVIEW BY VIRGINIA GEWIN