Although some young scientists embrace media engagement (see page 365 for a profile of one of them), many remain nervous. "I've had some young postdocs in politically charged institutions whisper to me, 'Hey, I have to wait until I have tenure, and then you'll hear from me," says Baron, adding that caution is sometimes warranted. In her book, Escape from the Ivory Tower: A Guide to Making Your Science Matter (Island Press, 2010), she cites the example of Martin Krkosek, a biologist who as a graduate student helped to show that sea-lice infestations linked to farmed salmon in Canada were hurting wild salmon populations. Between 2005 and 2007, he published in Science and elsewhere, and often spoke to the media. Controversy swirled. The salmon aquaculture industry refuted the findings, suggesting that the infestations were natural; but in 2008, British Columbia put a moratorium on fish-farm expansion, owing in part to Krkosek's work. He says that his media outreach may have hurt his cause at some departments where he applied for positions. At others it was an asset. "Waiting for tenure may be safer for career advancement in some instances," says Krkosek, now in a tenure-track position at the University of Otago in New Zealand. "But opportunities for communicating with public and policy audiences could be lost."

Young scientists should know the cultures of their institutions, fields and laboratories before they speak to the media, and find out whether frequent interactions are frowned on, says Dennis Meredith, author of Explaining Research: How to Reach Key Audiences to Advance Your Work (Oxford Univ. Press, 2010). And frequent media interactions can be a time sink — a big downside for graduate students trying to finish a dissertation, or postdocs in the middle of a big project. Often, young scientists will run into an adviser who thinks "every minute away from the bench is wasted", says Cornelia Dean, long-time science writer at The New York Times and author of Am I Making Myself Clear? A Scientist's Guide to *Talking to the Public* (Harvard Univ. Press, 2009). "I think the culture needs to change," says Dean. "You may feel you don't have media charisma, and don't have the energy to do it, but you can at least support the people doing it."

Lewenstein, though, believes that investigators baulk at student and postdoc media involvement less than they used to. Four years ago, when he asked the graduate students and postdocs taking his science-communication class how many of them were worried that their adviser would find out they were there, about half put their hands up. But when he held the same workshop this year, no hands were raised. "You need to recognize that there are consequences of working with the media," says Lewenstein. "But in the end it's good both for you as an individual, and for our overall society if you're connected with the public."

**Gene Russo** *is the Careers editor at* Nature.



## **COLUMN** A CV of failures

Keeping a visible record of your rejected applications can help others to deal with setbacks, says **Melanie Stefan**.

couple of months ago, I received a letter informing me that my fellowship application had failed. On the same day, Brazil's World Cup squad announced that football phenomenon Ronaldinho had not been selected. "Cool," I thought. "I am like Ronaldinho." But that thought offered only little consolation. No scientist enjoys such failures, but too often we hide them.

In a way, a fellowship rejection is to be expected. Most of these fellowships have success rates of about 15%, meaning that an applicant might be successful in only one out of every seven tries. For every hour I've spent working on a successful proposal, I've spent six hours working on ones that will be rejected. I don't mind the extra work — after all, if I abhorred tedious tasks with low chances of success, I would not be in research.

Even so, this means that for every endorsement, there are about six challenges to my ability, my determination and my vision. I find this harder to swallow. Perhaps this is because I have generally succeeded so far. I did well at school and later at university, earned the PhD position of my dreams, and have published several papers. This is the story that my CV reveals.

But that is exactly the problem. My CV does not reflect the bulk of my academic efforts — it does not mention the exams I failed, my unsuccessful PhD or fellowship applications, or the papers never accepted for publication. At conferences, I talk about the one project

that worked, not about the many that failed.

As scientists, we construct a narrative of success that renders our setbacks invisible both to ourselves and to others. Often, other scientists' careers seem to be a constant, streamlined series of triumphs. Therefore, whenever we experience an individual failure, we feel alone and dejected.

Such is not the case with every profession. Consider Ronaldinho. A football player cannot hide his setbacks. Everything is out in the open — every failure to be selected for a big competition, every injury, every missed penalty is on display. Maybe this is a good thing. It shows young aspiring players what it means to be a football player. It helps them to cope with their own setbacks.

So here is my suggestion. Compile an 'alternative' CV of failures. Log every unsuccessful application, refused grant proposal and rejected paper. Don't dwell on it for hours, just keep a running, up-to-date tally. If you dare — and can afford to — make it public. It will be six times as long as your normal CV. It will probably be utterly depressing at first sight. But it will remind you of the missing truths, some of the essential parts of what it means to be a scientist — and it might inspire a colleague to shake off a rejection and start again. 

■

Melanie Stefan keeps a Postdoc Journal at go.nature.com/yd2cjs and is a postdoc in neurobiology at the California Institute of Technology in Pasadena.