

Don't feed the hype!

'Scientists find key to age-related deafness—the public is deluged with headlines like this one that purport to identify the genetic causes of human disease. For those who read beyond the catchy headlines, the content of scientific articles varies—from the informative and accurate to the unsubstantiated and misleading. Whereas articles in the former category provide a great service to both the scientific community and the public, those in the latter are pernicious, leading to misperceptions and, worse, often creating false hopes. It is essential that the complexities and caveats of scientific advances accompany any report for public consumption. Unfortunately, a look through the newspapers suggests that this is often not the case. But are journalists the only sources of over-hyped science journalism? To what degree are journal editors, scientists and institutional press offices also culpable?

At the end of the day, journalists are ultimately responsible for the content of their stories, and it is indeed their responsibility to cull facts from hype and produce a balanced story. The above headline is fake. But it would not be unusual for it, or one like it, to appear following the publication of the paper in this issue by Konrad Noben-Trauth and colleagues (see page 21). A headline's goal is to entice readers—to coax them to read on about the future of science and medicine. But will the public, or journalists, understand that the paper is reporting the identification of a single-nucleotide change that is associated with age-related hearing loss in an inbred mouse line, and that the link between hearing loss in this mouse and in aging humans is purely speculative? Blaming journalists for over-hyping science is an obvious and all too simple answer, though. If we accept the fact that, like scientists, journalists will have a range of skills, knowledge and experience, then we must also accept responsibility for the material we supply them to use as the basis for their stories.

With the proliferation of writers emerging from several excellent science journalism programs around the world, we can expect the quality of coverage to improve. Nonetheless, there are a significant number of science writers out there who have not taken a biology class since high school, but are working a science beat. And although a journalist with a science background might be better equipped to understand some of the nuances of a given story, for example on a deafness gene,

this does not change the fact that, like all journalists, they will have to rely on press releases, interviews and fact checking to pull a story together so that it informs the public and holds readers' attention. This defines the art of journalism—and its pitfalls as well. It is an art that is often under-appreciated when done well, but always highlighted when the inept few rear their ugly headlines. If we accept the notion that over-hyping science is always a bad idea, then we have to take a close look at all sources of hype.

The copious press releases emitted by universities, research institutes, granting agencies and journals are one potential source. It is not atypical for a science writer or assignment editor to come into work and start leafing through a stack of press releases in search of a story. Press releases are a major source of story ideas, and arrive at such a rate that often little time can be devoted to considering each one carefully. The job of PR people is to get press coverage of science, but they experience the same pressure that scientists do when writing their grants—to link their work as directly as possible to human disease or to hype the work beyond its real scientific meaning. This reflects the current culture in the genetics community that expects research to be linked to human disease.

Despite attempts to keep your work in perspective, quotes that tone down the story so that it is less interesting than the press release that drew them to it in the first place are not what the journalist got in touch with you for. You serve two purposes to journalists: first, to help them understand the work; and second, to provide them with quotes that they can use to advance their story. By taking the time to explain the implications of your work clearly without using our field's rich jargon, you will avoid ending up with an embarrassing quote posted in your coffee room, and you will also lessen the perpetuation of hype.

Reducing the hype in press releases and during interviews is about as much as one can expect from a scientist whose work garners some public attention. For more detailed tips on dealing with the press, the Royal Society offers guidelines to scientists who are in this situation. Though not comprehensive, the guidelines provide advice that can be useful to the dark-reared scientist who is about to find his name in the newspaper. (<http://www.royalsoc.ac.uk/news>). ■