



# nature Structural biology

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## What makes the news?

What makes a good science news story? According to a group of writers gathered at a recent science writing workshop\* in Santa Fe, New Mexico, the answer is usually the same things that make any good news story — timeliness, importance, how many people are affected and relevance to the readership, an element of surprise, and in many cases, great pictures. Juicy bits such as sex, scandal, big money, and the capacity to elicit emotion also often lend themselves to sure-fire newsworthiness in today's society, but these traits are harder to come by in the world of science.

Given these criteria it is, sadly, somewhat understandable why structural biology studies are regularly passed over by journalists, even if the results are highly significant. With structural biology results, timeliness and personal relevance often seem lacking — there are usually no victims (other than maybe bacteria!), unlike a story about cancer. In addition, the cartoon-like pictures that would most easily illustrate a structural biology story are usually hard for the general reader to appreciate without excessive explanation. Fundamentally, the science of structural biology is usually viewed as too hard to present and too esoteric for the average reader to care about — and this is really too bad.

For example, last year one of the biggest advances in structural biology in decades — the determination of the ribosome structure — merited only 309 words in the *New York Times*, a newspaper with one of the most well-respected science sections in the world. In contrast, in May of this year alone, stories about Gleevec, a promising new cancer drug, warranted over 9,700 words in the same newspaper. One might hastily ascribe the discrepancy to the idea that stories involving people and life-threatening diseases are inherently more interesting. Certainly, there is no shortage of news stories covering the discoveries of genes linked to diseases — an area of science that can also be difficult to describe — which would support that idea. But then, that explanation does not account for why the *New York Times* has printed numerous science news stories (totaling over 5,000 words) dealing with black holes in the past year and a half. It is hard to argue that the physics of astronomical research is easier to explain than structural biology research. Perhaps the dearth of structural biology coverage can be ascribed to the perception that the public is simply more interested in the big mysteries of the universe and in the stars that they can see than they are in the mysteries of tiny, virtually invisible molecules within cells. If this pessimistic perspective is accurate, then scientists and news reporters should make an effort to change the way the public views the inner workings of cells.

Many newspapers and magazines have reporters dedicated to science news, and there are also numerous freelance writers who cover a science beat exclusively. But reporters do not have the final say about what gets published — section editors do. So, an idea for a story must be pitched to an editor, who will decide

whether or not the story is appropriate for the publication. How do reporters decide which stories to pitch? Many often have an intimate knowledge of the fields they follow, thanks to years of experience, and can sniff out good stories on their own by networking or attending scientific conferences. They also get help from research journals and university or industry press offices, which put out regular press releases to inform journalists of upcoming publications or recent results.

Journal press releases, summarizing the results of a few papers and listing the entire contents of the journal, are usually sent out by email about one week before publication. The information in the press release is under embargo until the publication date — that is, journalists are expected not to publicize the findings before the embargo is lifted. *Nature Structural Biology* is no exception to this practice, and you can see examples of press releases on our web site ([http://www.nature.com/nsb/press\\_release/](http://www.nature.com/nsb/press_release/)). While this gives reporters a good start, the best do not rely solely on this pre-publication information. Instead, they flesh out the story by talking to the researchers involved and to other scientists in the field. Given this, more scientists should be willing — and prepared — to discuss their results with reporters in terms that a layperson can understand, and they should be able to explain their research in a broader context that the general public will appreciate.

Discussing results with reporters who are attempting to accurately cover science in an interesting way should be viewed as an important part of a scientist's job, especially since the research is often publicly funded. However, sometimes this is not seen as a high priority, given the demands on a typical researcher's time. Thus, faced with the difficulty of finding a scientist willing and able to discuss the results in a lucid way, it can be frustrating or impossible for writers to sufficiently develop a story in time to meet a daily or weekly deadline. This constant deadline pressure can, unfortunately, make reporters lean toward easier stories, ones that fit a mold that people are more familiar with and thus take less effort to explain — such as a story about discovering a gene's involvement in a disease, or a story about the results of a clinical trial.

But, despite the difficulties, more writers should try their hands at reporting structural biology, soliciting help with their explanations from the scientific community, and more editors should encourage it. In the long run, this will help to educate people about what the molecules within our bodies do, how they participate in processes as diverse as digestion and vision. The media really should appreciate that such knowledge is likely to be of fundamental interest to the general public if presented properly — after all, who has never wondered how the processes that create and maintain life work?

\* Santa Fe Science Writing Workshop, Santa Fe, New Mexico, USA. June 16–21, 2001. Organized by George Johnson and Sandra Blakeslee, both writers for the *New York Times* and authors of several books.