

Déjà vu?

Today one can read about the latest advances in science not only in specialized journals, but in many other public forums such as newspapers and websites of companies and universities. This is certainly an important development that makes science an integral part of public life. But many journals, including *Nature Methods*, consider that a work's value can be compromised in various ways by different types of prior publications outside the peer-reviewed literature. Here are a few ground rules to avoid unpleasant surprises.

Accurate presentation of scientific developments in the popular press is important to educate the public. The timing of information release, however, is just as important. Most scientific journals impose an embargo on their content so that no information about an article may be published in the media prior to its publication in the peer-reviewed literature.

The reasons for a strict enforcement of the embargo are twofold. First, it is a way for journals to ensure that only accurate content that has passed the peer-review filter is presented to the public, avoiding premature reports that may be misleading or even incorrect. Second, scientists should have access to the original research at the same time they read about it in the newspaper so they can verify claims or interpretations and not solely rely on the word of a reporter. A prominent example occurred in July 2002, when the *Detroit Free Press* released information about a study of the risks of estrogen-plus-progestin hormone therapy a day before it was scheduled to appear online in *The Journal of the American Medical Association*. The story was quickly picked up by many news services, and as a result, a lot of concerned women called their physicians who did not yet have access to the details of the study and were ill-prepared to deal with these questions. The resulting confusion could easily have been avoided had the embargo date been observed.

To help journalists generate in-depth and accurate coverage, the *Nature* journals, for example, issue press releases to accredited correspondents who receive access to the latest articles with a brief summary and comments, under embargo, a few days before publication. This lead time allows reporters to research the background of a story and to conduct interviews with scientists. Similarly, researchers are encouraged to work with the press via their institution's press office, but are also required to observe

the embargo and not solicit press coverage of their work before its publication.

The embargo policy gives guidelines on how to communicate one's work in the days leading up to publication, but equal consideration should be given to publicity any time before new findings appear in a peer-reviewed journal. Some scientists, especially those working in for-profit companies, may be under more pressure to publicize their results early. The need for companies to inform their shareholders and potential investors about recent developments can prompt solicitation of press coverage or posting of results on the company website before publication in a peer-reviewed journal, which may cause an additional problem. In principle, *Nature Methods* welcomes submissions from scientists in commercial organizations; however, if details of the work are already available on the company website, the novelty of the report is compromised, and it will not be considered further.

At the same time, it should be emphasized that not all data posted on the internet jeopardize subsequent publication. We encourage discussion and exchange of ideas among scientists, and in no way object to the presentation of unpublished data at scientific meetings and the online or print publication of meeting abstracts. Scientists should, however, avoid giving interviews to the press about unpublished work. It is important to note that most major meeting organizers who welcome the press also issue warnings to journalists not to cover any specific information without the author's consent.

Our policy is also to allow posting of data on recognized preprint servers before submission. Although these servers are more common in the physics and mathematics communities, some established preprint servers such as arXiv, have biological categories. Preprint servers can be considered as 'online meetings', where content is posted for immediate discussion and feedback among a wider audience, and hence the same rules as for meetings apply.

Nature Methods' mission is the rapid dissemination of novel and accurate information on scientific methodologies. In line with this goal, these considerations related to novelty and press coverage should be taken into account by potential authors to best combine different publication forums for the maximum benefit of all those interested in reading about good science.