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editorial

Two sides to the story

Progress in science relies in part on the public presentation of results, and the discussion of their validity and meaning; but, how often have you attended a conference, heard an enlightening talk, listened to the speaker's confident explanations and then met a colleague over coffee who said, "wasn't that awful?"? Usually, this triggers a debate in which the speaker's arguments are scrutinized and their conclusions challenged. The problem, however, is that the speaker is not present and has no chance to respond. Such a one-sided debate not only is unfair, but also misses the opportunity to discuss rationally differing views on a specific topic.

To create a forum for such divergent interpretations of results, *EMBO reports* is launching a new type of article this month—the Talking Point—that allows scientists to present different views on a given topic. In the Reviews section of this issue, Michael S. Wolfe (see page 136) and Bart de Strooper (see page 141) present their views on the role of presenilin mutations in Alzheimer disease. In the future, we will feature Talking Points not only in the Reviews section, but also in the Science & Society section. Frequently, a third party will place the two views in context and draw a conclusion from the different perspectives.

We should not underestimate the need for this type of forum. Scientific research is replete with conflicting or divergent opinions, but there are few avenues available for debating these differences. Many research fields are dominated by schools of thought that can be traced back to a founding laboratory that created the original hypothesis. The prevailing theory is further confirmed and reinforced through particular methods of experimentation and analysis. 'Outsiders' who have developed their own ideas or methods might have a hard time publishing their 'deviant' data and interpretations in those journals that set the tone for the field; at conferences, they are likely to meet the fate outlined above.

The fact is that publications contradicting the current orthodoxy are more likely to undergo critical review before acceptance. Of course, this varies from paper to paper, but referees might be extra careful if a paper has the potential to challenge existing paradigms, rather than merely presenting more data to support a well-established theory. But to create a fruitful debate about the merits and shortcomings of each theory or interpretation of data—which is in the interests of both scientists and science—it is necessary to provide all parties with the opportunity to present their views side-by-side.

If the scientific community needs such a communication tool, it raises questions about the way in which research is presented—not only in journals. I have already written about the dangers of political correctness (Gannon F (2005) Is the system dumbing down research? *EMBO Rep* **6:** 387), which I believe can prevent honest dialogue. It would therefore be a great advantage if scientific talks were followed by debates on different views. Of course, this would require that the participants have their arguments well prepared, and avoid bitterness and rancor.

Debates on the societal aspects of research are usually more robust because these discussions are more often based on beliefs than on scientific theories. Different perceptions of what is 'right' lead to strong opinions, and there are no control experiments to resolve these disagreements. A few years ago, *EMBO reports* published an enlightening exchange on the controversial subject of genetically modified organisms (Trewavas AJ, Leaver CJ (2001) Is opposition to GM crops science or politics? *EMBO Rep* **2:** 455–459; Flothmann S, van Aken J (2001) Of maize and men. *EMBO Rep* **2:** 644–647); there are many other topics that deserve similar attention. By structuring each of these debates as a Talking Point, we hope that our readers will understand the basis for a different viewpoint and update themselves on the topic, even if they do not change their opinions.

There is another aspect of this issue that is worth mentioning. Reputations can be rapidly tarnished if one person uses a closed and friendly audience to question the quality of another's work. Fairness and civility require the right to reply. Those who believe that their iconoclastic view is being kept at the periphery of debates should contact us if they want to stimulate discussion. *EMBO reports* welcomes correspondence and provides another forum in the form of Concept articles. This peer-reviewed format allows authors to present ideas that are based on published data but that point to a novel interpretation of a biological problem. Collectively, we hope that these features will enable more free and intellectually satisfying debates, which, of course, should be at the heart of all scientific activities.

Frank Gannon

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