

EDITORIAL

... Scientific Interchange

In my previous Editorial I expressed my concerns about the effects that the current fashion for competition in the scientific disciplines was beginning to have on authors submitting papers for publication in scientific journals. I recognized that competition had been an important factor in the development of science but that this had primarily been competition for priority of recognition of findings or concepts, whereas in many countries competition seems to be acquiring many of the features of commercial competition, where competition for resources takes an understandable first place.

My concern was that the protection of the results of scientific research as commercial secrets, except where there was a possible patent to protect, would damage one of the most valuable aspects of the scientific life, the free discussion of ideas and preliminary results of current research with one's wider scientific colleagues, discussions which frequently evolved into 'brain-storming' sessions and which often served to generate really creative thinking.

Restriction on these discussions could make, for example, the informal contacts at scientific meetings less valuable because each party would be guarded in conversation to protect his or her ideas or findings, while hoping to pick-up crumbs of scientific intelligence from less inhibited colleagues.

Choosing Editors or Referees would become even more exacting than it is at present because of the needs to avoid clashes of interest. Incidentally, I was very interested to see that the *British Medical Journal* is now explicitly asking Referees to declare formally whether or not they have a conflict of interest regarding the paper, although in the real world of intelligence the damage would have been done as soon as one read the paper.

If reviewing a paper creates difficulties in such a competitive climate, what about peer-review of research proposals? Can you imagine the design philosophy and production details of a new product being sent to a commercial competitor for critical review on the understanding that the knowledge acquired would not be incorporated into the reviewer's developmental programme?

This brings me back to the concerns that authors have regarding the ethical standards of the peer-reviewing Editors and Referees that review papers submitted to the Journal in this competitive climate. It seems to me that we are expecting the researchers who are members of the Editorial Board, and the many Referees on whom the Journal depends for the maintenance of its scientific standards, to be other-worldly and not use the privileged information that they may see during the course of the review process.

Given the nature of memory it is virtually impossible to prevent any knowledge from influencing the development of ideas. Chinese walls may exist in the minds of some professions but I doubt their effectiveness in a creative activity.

Scientific Journals, because they depend on expert peer review, have a special responsibility to protect the intellectual property of authors during review and the selection of Editors and Referees is made on the basis of their specialist knowledge and integrity and I hope that we never abuse the trust that authors implicitly place on us when submitting a paper. Protection of the author's priority to the formulation of a concept is another topic that concerns me. Recently I was writing a long review and had occasion to wish to read

some key papers from the 1960s. This proved more difficult than I had anticipated because the pressures on shelf space in libraries have often forced librarians to relegate the older journals to unfriendly and inaccessible storage spaces where one requires determination to read them. These older papers are often not available on CD-ROM and, I fear, for some current authors may as well not exist. Several of the recent papers in these fields had very limited time-horizons and the authors clearly regard the more recent papers as being authoritative, although some cited were clearly of the 're-inventing the wheel' variety. These authors seemed to me to be depriving the original authors of their proper credit.

How can we protect those creative individuals whose contributions have been, and will be in the future, central to the development of nutritional understanding and innovative experimental and observational studies which test and expand the original hypotheses?

One way is to be more critical in our selection of references. Another, which we propose to implement, is the acceptance of papers that specifically develop nutritional hypotheses.

These papers will be expected to meet the same key criteria as any other paper, to advance the development of nutritional concepts and understanding. They will be reviewed in the same way as other papers and we would normally expect that the 'hypothesis' papers would propose how these hypotheses might be critically tested experimentally. These papers would have a number of valuable features, but most importantly they would encourage nutritional scientists to explore nutritional concepts critically and they would provide formal recognition for the potential contribution that theoretical work can make to the nutritional sciences as a whole.

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