AS I SEE IT

Quality control in science: recruiting, protecting and controlling the controllers

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To organise and operate a scientific journal is a major managerial task. High performers must be won as editors and reviewers (quality control). Usually they receive no payment but are often confronted with problems and criticism. Sometimes they are abused as scapegoats. No wonder then that good quality controllers are not easy to find.

Based on their own professional performance and on established scientific principles, quality controllers make judgements on submitted manuscripts (mss). These judgements must be scientifically sound, independent, impartial and fair. They decide on the fate of the ms (rejection, revision, acceptance) and influence the professional career of the author(s). Thus, controllers carry a heavy burden of responsibility.

Like all humans, quality controllers are liable to make mistakes and misjudgements. They may be biased, and they may be exposed to pressure from forces outside the scientific scene (e.g. political and economic). Scientists who are unable to stand up to such influences should not be quality controllers or managers of learned journals. Quality control must not degenerate into opinion control or complaisance!

Fair review procedures include the right of authors to appeal against editorial decisions and to present counter arguments. This may result in a second or third round of reviews.

After a ms is published, it becomes subject to scrutiny by the global scientific community. It is here that a final judgement develops. At Inter-Research we offer formalised procedures for critique by the scientific community and responses by the authors criticized (COMMENT/REPLY COMMENT exchanges; see MEPS Editorial: Kinne O (2002) Importance and organisation of direct post-publication critique. Mar Ecol Prog Ser 228:1).

Recruiting good quality controllers is an art. The recruiter must be able to present convincing arguments and his/her personality must signal reliability, as well as support and guidance in difficult situations. The recruiter must also see to it that the final composition of the editorial board reflects the whole breadth of the journal's scope. Since this may not always be fully achievable, outside experts will have to be contacted in addition.

The quality controllers recruited must be made aware of the need to declare and avoid potential conflicts of interest (see www.int-res.com/journals/cr/crInfo.html).

Where quality controllers are accused of misjudgements or poor performance, the accusations must be investigated. Unless mistakes or neglect can definitely be demonstrated, the quality controller expects and deserves—and usually also receives—protection by the editor-in-chief and/or the publisher.

Each editor—while a member of a team—must decide as an individual. *S/he* is the expert and thus responsible for selecting reviewers, overseeing their work, and for making a final decision. A final decision may not always be easy to make, especially if the subject is controversial. Nevertheless a decision has to be made!

The controller is an expert in defined subject areas. The assessment of his/her routine performance usually focuses on formal details such as guiding and speeding up the review procedures, checking the completeness of the ms, informing authors and publisher of the status of the review procedures.

In summary: Good quality controllers are rare. They act as independent experts and judges and as such deserve respect, support and protection by the editorin-chief and/or the publisher as long as they work correctly and in line with established scientific rules and procedures.

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