Ethical Guidelines to Publication of Scientific Research

The guidelines embodied in this document were revised by Taylor & Francis in February 2006.

OVERVIEW

Taylor & Francis serves the scientific profession and societies at large in many ways, among them by publishing journals which present the results of scientific, medical and engineering research. Every editor of a journal has the responsibility to establish and maintain guidelines for selecting and accepting papers submitted to that journal. In the main, these guidelines derive from the journal's definition of the scope and from the editor's perception of standards of quality for scientific work and its presentation. An essential feature of a profession is the acceptance by its members of a code that outlines desirable behaviour and specifies obligations of members to each other and to the public.

These guidelines are intended to be advisory rather than prescriptive, and to evolve over time. Such a code derives from a desire to maximize perceived benefits to society in general and to the profession as a whole, and to limit actions that might serve the narrow self interests of individuals. The advancement of science requires the sharing of knowledge between individuals, even though doing so may sometimes entail forgoing some immediate personal advantage. With these thoughts in mind, the editors of journals published by Taylor & Francis now present a set of ethical guidelines for persons engaged in the publication of scientific research, specifically, for editors, authors, and manuscript reviewers.

These guidelines are offered not in the sense that there is any immediate crisis in ethical behaviour, but rather from a conviction that the observance of high ethical standards is so vital to the whole scientific enterprise that a definition of those standards should be brought to the attention of all concerned. Taylor & Francis believe that most of the guidelines now offered are already understood and subscribed to by the majority of experienced researchers and academics. They may, however, be of substantial help to those who are relatively new to research. Even well-established scientists may appreciate an opportunity to review matters so significant to the practice of science.

GUIDELINES

A. Ethical obligations of editors of scientific journals

- An editor should give unbiased consideration to all manuscripts offered for publication, judging each on its merits without regard to race, religion, nationality, sex, seniority, or institutional affiliation of the author(s). An editor may, however, take into account relationships of a manuscript immediately under consideration to others previously or concurrently offered by the same author(s).
- 2. An editor should consider manuscripts submitted for publication with all reasonable speed and attention.
- 3. The sole responsibility for acceptance or rejection of a manuscript rests with the editor. Responsible and prudent exercise of this duty usually requires that the editor seek advice from two or more reviewers, chosen for their expertise and good judgment, as to the quality and reliability of manuscripts submitted for publication. However, manuscripts may be rejected without review if considered inappropriate for the journal.
- 4. The editor and members of the editorial team should not disclose any information about a manuscript under consideration to anyone other than those from whom professional advice is sought. (However, an editor who solicits, or otherwise arranges beforehand, the submission of manuscripts may need to disclose to a prospective author the fact that a relevant manuscript by another author has been received or is in preparation.) After a decision has been made about a manuscript, the editor and members of the editorial team may disclose or publish manuscript titles and authors' names of papers that have been accepted for publication, but no more than that unless the author's permission has been obtained.
- 5. An editor should respect the intellectual independence of authors.
- 6. Editorial responsibility and authority for any manuscript authored by an editor and submitted to the editor's journal should be delegated to some other qualified person, such as another editor of that journal or a member of its Editorial Advisory Board. Editorial consideration of the manuscript in any way or form by the author-editor would constitute a conflict of interest, and is therefore improper.
- 7. Unpublished information, arguments, or interpretations disclosed in a submitted manuscript should not be used in an editor's own research except with the consent of the author. However, if such information indicates that some of the editor's own research is unlikely to be profitable, the editor could ethically discontinue the work. When a manuscript is so closely related to the current or past research of an editor as to create a conflict of interest, the editor should arrange for some other qualified person to take

- editorial responsibility for that manuscript. In some cases, it may be appropriate to tell an author about the editor's research and plans in that area.
- 8. If an editor is presented with convincing evidence that the main substance or conclusions of a report published in an editor's journal are erroneous, the editor should facilitate publication of an appropriate report or note pointing out the error and, if possible, correcting it. The report may be written by the person who discovered the error or by an original author of the research.
- 9. An author may request that the editor not use certain reviewers in consideration of a manuscript. However, the editor may decide to use one or more of these reviewers, if the editor feels their opinions are important in the fair consideration of a manuscript. This might be the case, for example, when a manuscript seriously disagrees with the previous work of a potential reviewer.
- 10. An Editor should ideally send a PDF rather than Microsoft Word or other electronic file to reviewers and request that amendments, alterations or comments not be made to the electronic copy of the manuscript. It is important that all anonymous comments appear as such and with programmes such as Word the computer and user is often shown in tagging comments or amendments.

B. Ethical obligations of authors/contributors

- 1. An author's central obligation is to present an accurate account of the research performed as well as an objective discussion of its significance. Fabrication and falsification of data constitutes misconduct.
- 2. An author should recognize that journal space is a precious resource created at considerable cost. An author therefore has an obligation to use it wisely and economically.
- 3. A primary research report should contain sufficient detail and reference to public sources of information to permit the author's peers to repeat the work. When requested, the authors should make a reasonable effort to provide samples of unusual materials unavailable elsewhere, such as clones, microorganism strains, antibodies, etc., to other researchers, with appropriate material transfer agreements to restrict the field of use of the materials so as to protect the legitimate interests of the authors.
- 4. An author should cite those publications that have been influential in determining the nature of the reported work and that will guide the reader quickly to the earlier work that is essential for understanding the present investigation. This requires sufficient references to contextualize the work within its research context. Citation of work may be omitted if the author feels that it is not influential to the outcome or analysis of the reported work. Except in a review, citation of work that will not be referred to in the reported research should be minimized. An author is obligated to perform a literature search to find, and then cite, the original publications that describe closely related work. For critical materials used in the work, proper citation to sources should also be made when these were supplied by a non author.
- 5. Laboratory and clinical research should be driven by protocol; pilot studies should have a written rationale. Protocols must be carefully agreed by all contributors, including if appropriate the participants. Any unusual hazards inherent in the procedures, chemicals, equipment, or techniques used in an investigation should be clearly identified in a manuscript reporting the work.
- 6. Formal and documented ethical approval from appropriate research ethics committees are required for all studies using people, medical records and anonymised human tissues. Fully informed consent should always be sought where possible from all participants, otherwise an ethics committee should decide if the work is acceptable. Specific permission for facial photographs of patients is required. A letter of consent must accompany the photographs of patients in which a possibility of identification exists. It is not sufficient to cover the eyes to mask identity.
- 7. Contributors are required to follow the procedures in force in their countries which govern the ethics of work done with human or animal subjects. The Code of Ethics of the World Medical Association (Helsinki Declaration) represents a minimal requirement. When experimental animals are used, state the species, strain, number used, and other pertinent descriptive characteristics. For human subjects or patients, describe their characteristics. For human participants in a research survey, secure the consent for data and other material—verbatim quotations from interviews, etc.—to be used.
- 8. Authors must only submit studies where experimental methods and procedures reported were carried out ethically and had appropriate ethical approval where necessary. As well as a requirement for ethical approval to conduct the research, informed consent from subjects used in the research is also required.
- 9. When describing surgical procedures on animals, identify the pre anaesthetic and anaesthetic agents used and state the amount of concentration and the route and frequency of administration for each. The use of paralytic agents, (such as curare or succinylcholine), is not an acceptable substitute for anaesthetics. For other invasive procedures on animals, report the analgesic or tranquilizing drugs used; if none were used, provide justification for such exclusion. When reporting studies on unanaesthetized animals or on humans, indicate that the procedures followed were in accordance with institutional guidelines.

- 10. Fragmentation of research reports should be avoided. A scientist who has done extensive work on a system or group of related systems should organize publication so that each report gives a well rounded account of a particular aspect of the general study. Fragmentation consumes journal space excessively and unduly complicates literature searches. The convenience of readers is served if reports on related studies are published in the same journal, or in a small number of journals.
- 11. In submitting a manuscript for publication, an author should inform the editor of related manuscripts that the author has under editorial consideration or in press. Copies of those manuscripts should be supplied, if requested, to the editor, and the relationships of such manuscripts to the one submitted should be indicated.
- 12. It is improper for an author to submit manuscripts describing essentially the same research to more than one journal of primary publication, unless it is a resubmission of a manuscript rejected for or withdrawn from publication. It is generally permissible to submit a manuscript for a full paper expanding on a previously published brief preliminary account (a "communication", "conference report" or "letter") of the same work. However, at the time of submission, the editor should be made aware of the earlier communication, and the preliminary communication should be cited in the manuscript.
- 13. An author should identify the source of all information quoted or offered, except that which is common knowledge. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work without explicit permission from the investigator with whom the information originated. Information obtained in the course of confidential services, such as refereeing manuscripts or grant applications, should be treated similarly.
- 14. An experimental or theoretical study may sometimes justify criticism, even severe criticism, of the work of another scientist. When appropriate, such criticism may be offered in published papers. However, in no case is personal criticism ever considered to be appropriate.
- 15. The co-authors of a paper should be all those persons who have made significant scientific contributions to the work reported and who share responsibility and accountability for the results. Other contributions should be indicated in a footnote or an "Acknowledgments" section. An administrative relationship to the investigation does not of itself qualify a person for co-authorship (but occasionally it may be appropriate to acknowledge major administrative assistance). Deceased persons who meet the criterion for inclusion as co-authors should be so included, with a footnote reporting date of death. No fictitious name should be listed as an author or co-author. The author who submits a manuscript for publication accepts the responsibility (as corresponding author) of having included as co-authors all persons appropriate and none inappropriate. The submitting author should have sent each living co-author a draft copy of the manuscript and have obtained the co-author's assent to co-authorship of it.
- 16. The authors should reveal to the editor any potential conflict of interest, e.g., a consulting or financial interest in a company, that might be affected by publication of the results contained in a manuscript. The authors should ensure that no contractual relations or proprietary considerations exist that would affect the publication of information in a submitted manuscript.

C. Ethical obligations of reviewers of manuscripts

- 1. Inasmuch as the reviewing of manuscripts is an essential step in the publication process, and therefore in the operation of the scientific method, every scientist has an obligation to do a fair share of reviewing.
- 2. A chosen reviewer who feels inadequately qualified to judge the research reported in a manuscript should return it promptly to the editor.
- A reviewer (or referee) of a manuscript should judge objectively the quality of the manuscript, of its
 experimental and theoretical work, of its interpretations and its exposition, with due regard to the
 maintenance of high scientific and literary standards. A reviewer should respect the intellectual
 independence of the authors.
- 4. A reviewer should be sensitive to the appearance of a conflict of interest when the manuscript under review is closely related to the reviewer's work in progress or published. If in doubt, the reviewer should return the manuscript promptly without review, advising the editor of the conflict of interest or bias. Alternatively, the reviewer may wish to furnish a signed review stating the reviewer's interest in the work, with the understanding that it may, at the editor's discretion, be transmitted to the author.
- A reviewer should not evaluate a manuscript authored or co-authored by a person with whom the reviewer has a personal or professional connection if the relationship would bias judgment of the manuscript.
- 6. A reviewer should treat a manuscript sent for review as a confidential document. It should neither be shown to nor discussed with others except, in special cases, to persons from whom specific advice may be sought; in that event, the identities of those consulted should be disclosed to the editor.
- Reviewers should explain and support their judgments adequately so that editors and authors may understand the basis of their comments. Any statement that an observation, derivation, or argument

- had been previously reported should be accompanied by the relevant citation. Unsupported assertions by reviewers (or by authors in rebuttal) are of little value and should be avoided.
- 8. A reviewer should be alert to the failure of authors to cite relevant work by other scientists, bearing in mind that complaints that the reviewer's own research was insufficiently cited may seem self-serving. A reviewer should call to the editor's attention any substantial and significant similarity between the manuscript under consideration and any published paper or any manuscript submitted concurrently to another journal.
- 9. A reviewer should act promptly, submitting a report in a timely manner. Should a reviewer receive a manuscript at a time when circumstances preclude prompt attention to it, the unreviewed manuscript should be returned immediately to the editor. Alternatively, the reviewer might notify the editor of probable delays and propose a revised review date.
- 10. Reviewers should not use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author. If this information indicates that some of the reviewer's work is unlikely to be profitable, the reviewer, however, could ethically discontinue the work. In some cases, it may be appropriate for the reviewer to write the author, with copy to the editor, about the reviewer's research and plans in that area.
- 11. The review of a submitted manuscript may sometimes justify criticism, even severe criticism, from a reviewer. When appropriate, such criticism may be offered in published papers. However, in no case is personal criticism of the author ever considered to be appropriate.
- 12. Ideally a reviewer should not make their comments on the appropriateness of publication of a manuscript on the electronic copy of the work as this can have the details of the reviewer and institution embedded into the computers' programming. All comments and proposed alterations to the text should be made on a hard copy of the manuscript for the Journal Editor to review.

D. Ethical obligations of scientists publishing outside the scientific literature

- 1. A scientist publishing in the popular literature has the same basic obligation to be accurate in reporting observations and unbiased in interpreting them as when publishing in a scientific journal.
- 2. Inasmuch as laymen may not understand scientific terminology, the scientist may find it necessary to use common words of lesser precision to increase public comprehension. In view of the importance of scientists' communicating with the general public, some loss of accuracy in that sense can be condoned. The scientist should, however, strive to keep public writing, remarks, and interviews as accurate as possible consistent with effective communication.
- 3. A scientist should not proclaim a discovery to the public unless the experimental, statistical, or theoretical support for it is of strength sufficient to warrant publication in the scientific literature. An account of the experimental work and results that support a public pronouncement should be submitted as quickly as possible for publication in a scientific journal. Scientists should, however, be aware that disclosure of research results in the public press or in an electronic database or bulletin board might be considered by a journal editor as equivalent to a preliminary communication in the scientific literature.