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Journal Policy on Ethics in Scientific Publication

Medical journals aspire to select, through peer review, the highest quality science, and their reputations depend on the trust of readers, authors, researchers, reviewers, and patients. Almost every aspect of this process involves important ethical principles and decisions, which are seldom explicitly stated and even less often shared with the readership. A comprehensive policy on publication ethics is summarized in this article. A few of the topics addressed are study design; research subject consent; definitions and responsibilities of authorship; declaration of paid writers; types of potential conflicts of interest; management of conflicts of interest on the part of authors, journal reviewers, and members of the editorial board; blinding and confidentiality of peer review; assessment of peer review quality; public identification of degree of peer review of various portions of the journal; criteria for manuscript decisions; management of author appeals; definitions of prior publication; plagiarism; criteria for advertising and relationship between advertising and editorial matter; allegations of misconduct and journal policies for responding to them; and the relationship of the journal to the sponsoring society. Our goal in publishing these policies is to make the guiding ethical principles of this journal accessible to all of our readers and contributors.

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THE PURPOSE OF THE POLICY

The goal of *Annals of Emergency Medicine* is to publish the highest quality science. To achieve this, the entire peer review and publication process must be thorough, objective, and fair. Almost every aspect of this process involves important ethical principles and decisions, which are seldom explicitly stated by journals and even less often shared with readers. The journal's reputation depends on the trust of readers, authors, researchers, reviewers, editors, patients, and research subjects. This trust is earned and enhanced by describing as explicitly as possible our expectations and policies to ensure objectivity, fairness, and the ethical treatment of all participants in the publication process. *Annals* has long had a variety of policies on such ethical issues, but, for the first time, they are now combined in this document.

STUDY DESIGN AND ETHICS

Good research should be well-justified, well-planned, and appropriately designed so it can properly address the research question. Statistical issues, including power calculations, should be considered early in study design to avoid futile studies that produce subject risk without enrollment sufficient to answer the research question. Research should be conducted to high standards of quality control and data analysis. Data and records must be retained and produced for review on request. Fabrication, falsification, concealment, or misrepresentation of data constitute scientific misconduct.

Documented review and approval from a formally constituted review board (Institutional Review Board or Committee) are required for all studies involving people, medical records, and human tissues. If the study is judged exempt from review, a statement from the committee will be required. Informed consent by participants should always be sought. If not possible, an institutional review board must decide whether this is ethically acceptable.

Animal experiments require full compliance with local, national, ethical, and regulatory principles and local licensing arrangements.

Journal recommendations for preferred presentation and analysis of data are described in the Instructions for Authors (www.mosby.com/AnnEmergMed/InstructionsforAuthors).

AUTHORSHIP

There is no universally agreed on definition of authorship. We believe that authorship implies a significant intellectual contribution to the work and some role in writing the manuscript, but authorship roles can vary. To avoid disputes and misunderstandings that can delay or prevent publication, participants should determine early in the research and writing process who will be an author and in what sequence.

For all manuscripts, the corresponding author is required to provide information on the specific contributions each author has made to the manuscript.¹ The purpose of the listing is to identify clearly who is responsible for the quality, accuracy, and ethics of the work, and who will reply if questions arise or more information is needed. This description of author contributions accompanies the printed article. The authors are responsible for creating all components of the manuscript. If writers are provided by the sponsoring or funding institution or corporation to draft or revise the manuscript, the name of the writer and his or her sponsoring organization must be provided. The writer's name and contribution will be provided in the acknowledgments. We do not recognize "honorary" authorship (ie, when authorship is granted as a favor to someone powerful or prestigious who would not have qualified for it otherwise).

All authors must take responsibility, in writing, for the accuracy of the manuscript, and one author must be the guarantor and take responsibility for the work as a whole.

CONFLICTS OF INTEREST

One definition of a conflict of interest is some fact known to a participant in the publication process which, if revealed later, would make a reasonable reader feel misled or deceived (or an author, reviewer, or editor feel defensive). Conflicts of interest may influence the

judgment of authors, reviewers, and editors; these conflicts often are not immediately apparent to others. They may be personal, commercial, political, academic, or financial. Financial interests may include employment, research funding, stock or share ownership, payment for lectures or travel, consultancies, nonfinancial support, or any fiduciary interest in the company. The perception of a conflict of interest is nearly as important as an actual conflict because both erode trust.

All such interests (or their absence) must be declared in writing by authors on submission of the manuscript. This information will be published with the article. If there is doubt about whether a circumstance represents a conflict, it should be disclosed so that editors may assess its significance. Sources of full or partial funding or nonfinancial support must be declared; if anyone besides the authors is involved in analysis, interpretation, or control of the data, this must also be declared.

Regular reviewers for the journal are required to routinely declare any similar competing interests that might involve their work for *Annals*. Additionally, any reviewer who might have a conflict of interest on a particular manuscript is required to reveal that conflict to the supervising editor, who will then determine his or her appropriate level of involvement.

Editors can also have conflicts of interest, and members of the editorial board (just like authors and reviewers) are required to declare annually any conflicts of interest. Any editor assigned the review of a manuscript on which they may have a conflict of interest will recuse himself or herself from that supervision, and the manuscript will be reassigned to an editor with no conflict.

Manuscripts authored by members of the editorial board present a special instance of potential conflict of interest. The review of these manuscripts will always be proctored by a senior-level editor (ie, Deputy Editor or higher) who will review the decision of the assigned editor for objectivity before the decision is final.

PEER REVIEW

Peer review is fundamental to the scientific publication process and the dissemination of sound science. Peer

reviewers are experts chosen by editors to provide written assessment of the strengths and weaknesses of written research, with the aim of improving the reporting of research and identifying the most appropriate and highest quality material for the journal.

Regular peer reviewers selected for the journal will be required to meet minimum standards regarding original research, publication of articles, and formal training. Reviews will be expected to be professional, courteous, prompt, and constructive. The desired major elements of a quality review for *Annals* have been defined as follows:

- The reviewer identified and commented on major strengths and weaknesses of study design and methodology.
- The reviewer commented accurately and productively on the quality of the author's interpretation of the data, including acknowledgment of its limitations.
- The reviewer commented on major strengths and weaknesses of the manuscript as a written communication, independent of the design, methodology, results, and interpretation of the study.
- The reviewer provided the author with useful suggestions for improvement of the manuscript.
- The reviewer's comments to the author were constructive and professional.
- The review provided the editor the proper context and perspective to make a decision on acceptance (and/or revision) of the manuscript.

All reviewers will be informed of the journal's expectations, and the editors should make an effort to educate them and suggest educational materials (eg, *Annals'* "An Instructional Guide for Peer Reviewers of Biomedical Manuscripts" training CD-ROM) to those who may need it. The editors routinely assess all reviews for quality. Ratings of review quality and other performance characteristics of reviewers will be assessed periodically to ensure optimal journal performance, and will contribute to decisions on reappointment. Individual performance data will be confidential. Performance measures will also be used to assess changes in processes that might improve journal performance, but if so, they will be used in the aggregate and not in a way that could identify any individual.

Review at *Annals* is double-blinded; that is, authors are asked to remove all identifying information from their manuscripts sent to the reviewer, and the reviewer does not reveal his or her identity to the authors.

Authors may suggest reviewers, but there is no obligation on editors to use those suggestions.

The submitted manuscript is a privileged communication; reviewers must treat it as confidential and it should not be retained or copied. It may not be shared with any colleagues without the explicit permission of the editor and the corresponding author. Reviewers and editors must not make any personal or professional use of the data, arguments, or interpretations (other than those directly involved in its peer review) prior to publication unless they have the authors' specific permission, or are writing an editorial or brief commentary to accompany the manuscript.

If reviewers suspect misconduct, they should notify the editor in confidence and are not to share their concerns with other parties unless officially notified by the journal that they may do so.

High-quality review is important, but equally important is that readers be able to readily determine which contents of the journal are peer reviewed. Unless otherwise stated, all original articles published in *Annals* are peer reviewed by members of the editorial board and expert reviewers. This includes original research, case conferences and reports, concepts and state-of-the-art reviews, special contributions, Clinical Topic Reviews in Evidence-Based Emergency Medicine, and Skills for Evidence-Based Emergency Care. Departments in the journal (Correspondence; Editorials; Brief Commentaries; Health Policy Report; Residents' Perspective; CDC Update; NHTSA Notes; Evidence-Based Emergency Medicine "Feedback," "Updates," and "Abstracts"; Change of Shift; and Media and Book Reviews) are peer reviewed by an editorial board member. The American College of Emergency Physicians (ACEP) Policy Statements and Clinical Policies are not peer reviewed by the journal.

Annals will publish annual audits of acceptance rates, publication intervals, and other performance data.

Review materials and original submitted manuscripts may sometimes be useful for educational purposes, for review by other parties in the peer review process (other than the editor or other reviewers of the same manuscript), or in educational products. No reviews or manuscripts will be so used without the express written permission of the reviewer or authors.

The Editor in Chief appoints individuals to serve terms on the editorial board. Candidates are chosen based on expertise in a specific research field, geographic distribution, and other factors, balanced with the manuscript demographics and needs of the journal. The goal is to maintain an editorial board that is as broadly representative of the specialty as possible while also exemplifying high achievement not only in clinical, educational, and research skills, but also in scientific writing and editing. Each year, suggestions for new candidates are solicited from editorial board members and other leaders in emergency medicine. Their suggestions are reviewed by the Deputy Editors and Editor in Chief and further information is solicited from candidates of interest.

EDITORIAL DECISIONS

Decisions about a manuscript will be based only on its importance, originality, clarity, and relevance to the journal's scope and content. Studies with negative results or those challenging previously published work will receive equal consideration.

If an author appeals a decision, it will be reviewed by a Deputy Editor or the Editor in Chief.

If a published paper is subsequently found to have errors or major flaws, *Annals* will take responsibility for promptly correcting the written record in the journal.

Performance characteristics of editors will be periodically assessed to ensure timeliness and quality, and will contribute to decisions on reappointment. Individual performance data will be confidential. These measures will also be used to assess changes in processes that might improve journal performance. If these are used, it will be in the aggregate and not in a way that could identify any individual.

The handling of manuscripts that may represent a conflict of interest for editors is described under the section on conflict of interest.

ORIGINALITY, PRIOR PUBLICATION, AND MEDIA RELATIONS

Annals seeks original work that has not been previously published. Web and other electronic publication is considered the same as print publication for purposes of this policy. Redundant publication occurs when multiple papers, without full cross reference in the text, share the same data or results. Re-publication of a paper in another language, or simultaneously in multiple journals with different audiences, may be acceptable provided that there is full and prominent disclosure of its original source at the time of submission of the manuscript. At the time of submission, authors should disclose details of related papers they have authored, even if in a different language, similar papers in press, and any closely related papers previously published or currently under review at another journal.

Because medical research findings are of increasing interest to the lay media, journalists attend scientific meetings at which preliminary research findings are presented, which can lead to their premature publication in the mass media. Publication of details not included in the abstract or meeting presentation is not advised until the manuscript has been published in a peer-reviewed journal, because this means that enough detailed evidence has been provided to satisfy peer reviewers and editors. Where this is not possible, authors should help journalists to produce accurate reports, but should refrain from supplying additional data if they wish their material to be of sufficient original interest to warrant publication in peer-reviewed journals.

Previous publication of an abstract from the proceedings of meetings (print or electronic) does not preclude subsequent submission for publication, but full disclosure should be made at the time of submission.

The full text of the journal's embargo policy (on release of information to the media about upcoming contents) is available from the journal.

PLAGIARISM

Plagiarism is the use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source. The intent and effect of plagiarism is to mislead the reader as to the contributions of the plagiarizer. This applies whether the ideas or words are taken from abstracts, research grant applications, Institutional Review Board applications, or unpublished or published manuscripts in any publication format (print or electronic).

Plagiarism is scientific misconduct.

ADVERTISING

Many scientific journals derive significant income from advertising or reprints, creating a potential conflict of interest. Editorial decisions at *Annals* will not be influenced by advertising revenue or reprint potential. Editorial and advertising functions at the journal will be independent. Advertisers and donors will have no control over editorial material under any circumstances.

Reprinted articles will only be published as they originally appeared in the journal (including subsequent corrections); that is, there will be no alteration or revision of articles for a supplement or reprint other than corrections. The content of special supplementary issues will be determined only by the usual editorial process and will not in any way be determined by the funding source or advertisers.

Annals has a formal advertising policy² that is only excerpted here. *Annals* requires that all advertisements clearly identify the advertiser and the product or service being offered. In the case of drug advertisements, the full generic name of each active ingredient shall appear. Commercial advertisements in *Annals* will not be placed adjacent to any editorial matter that discusses the product being advertised, nor adjacent to any article reporting research on the advertised product.

General Eligibility Requirements

Products or services eligible for advertising in *Annals of Emergency Medicine* must be germane to (a) the practice of medicine, (b) medical education, or (c) health care delivery. The *Annals*' staff may consult with the Editor in Chief in questionable cases to determine whether products are eligible for advertising in *Annals*. Special requirements for various types of advertising follow.

Drugs. The regulations of the US Food and Drug Administration (FDA) provide exacting legal controls over the claims that drug advertisers may make for their products and require them to state contraindications, hazards, etc. Products advertised in *Annals* must be approved by the FDA for advertising in the United States and such advertising must meet FDA requirements.

A pharmaceutical product requiring approval of a New Drug Application by the FDA will not be eligible for advertising until such approval has been granted. However, as is common practice, *Annals* will allow pharmaceutical manufacturers to run ads that do not mention a specific product name, prior to a product's official FDA approval.

Medical apparatus, instruments, or devices. As with drug advertising, it is the manufacturer's responsibility to adhere to FDA regulations governing the manufacture of medical devices. Complete scientific and technical data concerning the product's safety, operation, and usefulness should be made available on request. *Annals* may decline advertising for any product being investigated or challenged by a government agency regarding claims made in marketing the product.

Alcoholic beverages, tobacco products, investment opportunities. These products are not eligible for advertising.

Advertisements may not be deceptive or misleading. Exaggerated or extravagantly worded copy will not be allowed. Advertisements will not be accepted if they appear to be indecent or offensive in either text or artwork, or contain negative content of a personal, racial, ethnic, sexual orientation, or religious character.

Annals may refuse any advertisement for any reason. The decision as to acceptance (and any questions about eligibility raised by readers or others) will be made by the *Annals*' Director, in consultation with the Editor in

Chief. The *Annals*' Editor in Chief will be regularly informed about the evaluation of advertising, especially ads that are refused due to non-compliance with these guidelines.

The full text of the journal's advertising policy is available from the journal.²

RESPONDING TO ALLEGATIONS OF POSSIBLE MISCONDUCT

Concerns about misconduct can arise regarding authors, reviewers, editors, and others. When such allegations are made regarding any part of the peer review or publication process, *Annals* will follow the policy outlined here. The journal does not have the resources or authority to conduct a formal judicial inquiry or arrive at a formal conclusion regarding misconduct. That process is the role of the individual's employer, university, granting agency, or regulatory body. However, the journal does have a responsibility to help protect the integrity of the public scientific record by sharing reasonable concerns with authorities who can conduct such an investigation.

Deception may be deliberate, by reckless disregard of possible consequences, or by ignorance. Because the underlying goal of misconduct is to deliberately deceive others as to the truth, the journal's preliminary investigation of potential misconduct must take into account not only the particular act or omission, but also the apparent intention (as best it can be determined) of the person involved. Misconduct does not include unintentional error.

Investigating Possible Misconduct

All allegations of misconduct will be referred to the Editor in Chief, who will review the circumstances in consultation with the Deputy Editors. Initial fact-finding will usually include a request to all of the involved parties to state their case and explain the circumstances, in writing. In questions of research misconduct centering on methods or technical issues, the Editor in Chief may confidentially consult experts who are blinded to the identity of the individuals, or if the alle-

gation is against an editor, an outside editor expert. The Editor in Chief and Deputy Editors will arrive at a conclusion as to whether there is enough evidence to lead a reasonable person to believe there is a possibility of misconduct. Their goal is not to determine if actual misconduct occurred or the precise details of that misconduct.

When allegations concern authors, the peer review and publication process for the manuscript in question will be halted while the aforementioned process is carried out. The investigation procedures described here will be completed even if the authors withdraw their manuscript, and the responses (see next section) will still be considered. In the case of allegations against reviewers or editors, they will be replaced in the review process while the matter is investigated.

All such allegations will be kept confidential; the number of inquiries and those involved will be kept minimal to achieve this end. Whenever possible, references to the case in writing will be kept anonymous.

If the Editor in Chief and Deputy Editors find no evidence of misconduct according to the previously described standard, the editorial processes should proceed in the normal manner.

Responses to Possible Misconduct

The journal has an obligation to readers and patients to ensure that its published research is both accurate and adheres to the highest ethical standard. Therefore, if the Editor in Chief and Deputy Editors conclude there is a reasonable possibility of misconduct, responses will be undertaken, chosen in accordance with the apparent magnitude of the misconduct. Responses may be applied separately or combined, and their implementation will depend on the circumstances of the case as well as the responses of the participating parties and institutions. The following options are ranked in approximate order of severity:

- A letter of explanation (and education) sent only to the person against whom the complaint is made, where there appears to be a genuine and innocent misunderstanding of principles or procedure.

- A letter of reprimand sent only to the same party, warning of the consequences of future such instances, where the misunderstanding appears not to be entirely innocent.

- A formal letter referring the concerns to the relevant head of educational institution and/or funding body, with all the commentary and evidence collected by the journal. This will occur when it is believed that genuine misconduct is likely to have occurred, and its goal will be to submit the case for consideration of formal review and judgment by organizations better suited to that task than a peer review journal.

- A formal letter as mentioned previously is sent, including a written request to the supervising institution that an investigation be carried out and the findings of that inquiry reported in writing to the journal.

- Publication of a notice of redundant publication or plagiarism, if appropriate (and unequivocally documented).

- Formal withdrawal or retraction of the paper from the scientific literature, published in the journal, informing readers and the indexing authorities (eg, National Library of Medicine), if there is a formal finding of misconduct by an institution.

Editors or reviewers who are found to have engaged in scientific misconduct will be removed from further association with the journal.

RELATION OF THE JOURNAL TO THE SPONSORING SOCIETY

The journal is owned by ACEP. However, ACEP does not determine editorial content of the journal. The journal publishes ACEP's Policy Statements and Clinical Policies, which are labeled as such and which are not peer reviewed or edited by the journal. All other articles originating from ACEP sources (eg, committees) are submitted to the same peer review process as materials from other sources and are subject to the same criteria for acceptance.

The Editor in Chief is selected, appointed, and periodically assessed as to performance by the ACEP Board

of Directors. Details of the assessment process and the complete policy are available from ACEP.

Reprints not available from the author.

I express my thanks to all of the members of the editorial board of *Annals of Emergency Medicine*, who reviewed, critiqued, and improved this policy.

REFERENCES

1. Callaham ML, Waeckerle JF. Deciphering the authorship code. *Ann Emerg Med.* 2001;37:386-387.
2. American College of Emergency Physicians. Advertising policy [policy statement]. Approved by the ACEP Board of Directors June 1998. Available at: <http://www.acep.org/1,4526.0.html>. Accessed December 16, 2002.