GUIDING PRINCIPLES FOR RESEARCH INVOLVING ANIMALS AND HUMAN BEINGS

The research described in papers submitted to any of the APS publications that involve the use of human beings must adhere to the principles of the Declaration of Helsinki and Title 45, U.S. Code of Federal Regulations, Part 46, Protection of Human Subjects, Revised November 13, 2001, effective December 13, 2001 (http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm). Research involving animals must adhere to APS’s Guiding Principles in the Care and Use of Animals. APS insists that all investigations involving humans or animals reported in its publications be conducted in conformity with these principles and that a statement of protocol approval from an IRB or IACUC or equivalent is included in the methods section of the paper. In describing surgical procedures, the type and dosage of the anesthetic agent should be specified. Curarizing agents are not anesthetics; if these are used, evidence must be provided that anesthesia of suitable grade and duration was employed. Editors/Associate Editors are expected to refuse papers in which evidence of the adherence to these principles is not apparent. They reserve the right to judge the appropriateness of the use of animals and humans in experiments published in the journals. Differences of opinion will be adjudicated by the Publications Committee.

WORLD MEDICAL ASSOCIATION DECLARATION OF HELSINKI

Ethical Principles for Medical Research Involving Human Subjects

A. Introduction

1. The World Medical Association has developed the Declaration of Helsinki as a statement of ethical principles to provide guidance to physicians and other participants in medical research involving human subjects. Medical research involving human subjects includes research on identifiable human material or identifiable data.

2. It is the duty of the physician to promote and safeguard the health of the people. The physician’s knowledge and conscience are dedicated to the fulfillment of this duty.

3. The Declaration of Geneva of the World Medical Association binds the physician with the words, “The health of my patient will be my first consideration,” and the International Code of Medical Ethics declares that, “A physician shall act only in the patient’s interest when providing medical care which might have the effect of weakening the physical and mental condition of the patient.”

4. Medical progress is based on research which ultimately must rest in part on experimentation involving human subjects.

5. In medical research on human subjects, considerations related to the well-being of the human subject should take precedence over the interests of science and society.

6. The primary purpose of medical research involving human subjects is to improve prophylactic, diagnostic and therapeutic procedures and the understanding of the aetiology and pathogenesis of disease. Even the best proven prophylactic, diagnostic, and therapeutic methods must continuously be challenged through research for their effectiveness, efficiency, accessibility and quality.

7. In current medical practice and in medical research, most prophylactic, diagnostic and therapeutic procedures involve risks and burdens.

8. Medical research is subject to ethical standards that promote respect for all human beings and protect their health and rights. Some research populations are vulnerable and need special protection. The particular needs of the economically and medically disadvantaged must be recognized. Special attention is also required for those who cannot give or refuse consent for themselves, for those who may be subject to giving consent under duress, for those who will not benefit personally from the research and for those for whom the research is combined with care.

9. Research Investigators should be aware of the ethical, legal and regulatory requirements for research on human subjects in their own countries as well as applicable international requirements. No national ethical, legal or regulatory requirement should be allowed to reduce or eliminate any of the protections for human subjects set forth in this Declaration.

B. Basic Principles for All Medical Research

10. It is the duty of the physician in medical research to protect the life, health, privacy, and dignity of the human subject.

11. Medical research involving human subjects must conform to generally accepted scientific principles, be based on a thorough knowledge of the scientific literature, other relevant sources of information, and on adequate laboratory and, where appropriate, animal experimentation.

12. Appropriate caution must be exercised in the conduct of research which may affect the environment, and the welfare of animals used for research must be respected.

13. The design and performance of each experimental procedure involving human subjects should be clearly formulated in an experimental protocol. This protocol should be submitted for consideration, comment, guidance, and where appropriate, approval to a specially appointed ethical review committee, which must be independent of the investigator, the sponsor or any other kind of undue influence. This independent committee should be in conformity with the laws and regulations of the country in which the research experiment is performed. The committee has the right to monitor ongoing trials. The researcher has the obligation to provide monitoring information to the committee, especially any serious adverse events. The researcher should also submit to the committee, for review, information regarding funding, sponsors, institutional affiliations, other potential conflicts of interest and incentives for subjects.

14. The research protocol should always contain a statement of the ethical considerations involved and should indicate that there is compliance with the principles enunciated in this Declaration.

15. Medical research involving human subjects should be conducted only by scientifically qualified persons and under the supervision of a clinically competent medical person. The responsibility for the human subject must always rest with a medically qualified person and never rest on the subject of the research, even though the subject has given consent.

16. Every medical research project involving human subjects should be preceded by careful assessment of predictable risks and burdens.

---


on with foreseeable benefits to the subject or to others. This does not preclude the participation of healthy volunteers in medical research. The design of all studies should be publicly available.

17. Physicians should abstain from engaging in research projects involving human subjects unless they are confident that the risks involved have been adequately assessed and can be satisfactorily managed. Physicians should cease any investigation if the risks are found to outweigh the potential benefits or if there is conclusive proof of positive and beneficial results.

18. Medical research involving human subjects should only be conducted if the importance of the objective outweighs the inherent risks and burdens to the subject. This is especially important when the human subjects are healthy volunteers.

19. Medical research is only justified if there is a reasonable likelihood that the populations in which the research is carried out stand to benefit from the results of the research.

20. The subjects must be volunteers and informed participants in the research project.

21. The right of research subjects to safeguard their integrity must always be respected. Every precaution should be taken to respect the privacy of the subject, the confidentiality of the patient’s information, and to minimize the impact of the study on the subject’s physical and mental integrity and on the personal relationships of the subject.

22. In any research on human beings, each potential subject must be adequately informed of the aims, methods, sources of funding, any possible conflicts of interest, institutional affiliations of the researcher, the anticipated benefits and potential risks of the study and the discomfort it may entail. The subject should be informed of the right to abstain from participation in the study or to withdraw consent to participate at any time without reprisal. After ensuring that the subject has understood the information, the physician should then obtain the subject’s freely-given informed consent, preferably in writing. If the consent cannot be obtained in writing, the non-written consent must be formally documented and witnessed.

23. When obtaining informed consent for the research project the physician should be particularly cautious if the subject is in a dependent relationship with the physician or may consent under duress. In that case the informed consent should be obtained by a well-informed physician who is not engaged in the investigation and who is completely independent of this relationship.

24. For a research subject who is legally incompetent, physically or mentally incapable of giving consent or is a legally incompetent minor, the investigator must obtain informed consent from the legally authorized representative in accordance with applicable law. These groups should not be included in research unless the research is necessary to promote the health of the population represented and this research cannot instead be performed on legally competent persons.

25. When a subject deemed legally incompetent, such as a minor child, is able to give assent to decisions about participation in research, the investigator must obtain that assent in addition to the consent of the legally authorized representative.

26. Research on individuals from whom it is not possible to obtain consent, including proxy or advance consent, should be done only if the physical/mental condition that prevents obtaining informed consent is a necessary characteristic of the research population. The specific reasons for involving research subjects with a condition that renders them unable to give informed consent should be stated in the experimental protocol for consideration and approval of the review committee. The protocol should state that consent to remain in the research should be obtained as soon as possible from the individual or a legally authorized surrogate.

27. Both authors and publishers have ethical obligations. In publication of the results of research, the investigators are obliged to preserve the accuracy of the results. Negative as well as positive results should be published or otherwise publicly available. Sources of funding, institutional affiliations and any possible conflicts of interest should be declared in the publication. Reports of experimentation not in accordance with the principles laid down in this Declaration should not be accepted for publication.

C. Additional Principles for Medical Research Combined with Medical Care

28. The physician may combine medical research with medical care, only to the extent that the research is justified by its potential prophylactic, diagnostic or therapeutic value. When medical research is combined with medical care, additional standards apply to protect the patients who are research subjects.

29. The benefits, risks, burdens and effectiveness of a new method should be tested against those of the best current prophylactic, diagnostic, and therapeutic methods. This does not exclude the use of placebo, or no treatment, in studies where no proven prophylactic, diagnostic or therapeutic method exists. Note of clarification on paragraph 29 of the WMA Declaration of Helsinki: The WMA hereby reaffirms its position that extreme care must be taken in making use of a placebo-controlled trial and that in general this methodology should only be used in the absence of existing proven therapy. However, a placebo-controlled trial may be ethically acceptable, even if proven therapy is available, under the following circumstances: Where for compelling and scientifically sound methodological reasons its use is necessary to determine the efficacy or safety of a prophylactic, diagnostic or therapeutic method; or Where a prophylactic, diagnostic or therapeutic method is being investigated for a minor condition and the patients who receive placebo will not be subject to any additional risk of serious or irreversible harm. All other provisions of the Declaration of Helsinki must be adhered to, especially the need for appropriate ethical and scientific review.

30. At the conclusion of the study, every patient entered into the study should be assured of access to the best proven prophylactic, diagnostic and therapeutic methods identified by the study. Note of clarification on paragraph 30 of the WMA Declaration of Helsinki: The WMA hereby reaffirms its position that it is necessary during the study planning process to identify post-trial access by study participants to prophylactic, diagnostic and therapeutic procedures identified as beneficial in the study or access to other appropriate care. Post-trial access arrangements or other care must be described in the study protocol so the ethical review committee may consider such arrangements during its review.

31. The physician should fully inform the patient which aspects of the care are related to the research. The refusal of a patient to participate in a study must never interfere with the patient-physician relationship.

32. In the treatment of a patient, where proven prophylactic, diagnostic and therapeutic methods do not exist or have been ineffective, the physician, with informed consent from the patient, must be free to use unproven or new prophylactic, diagnostic and therapeutic measures, if in the physician’s judgement it offers hope of saving life, re-establishing health or alleviating suffering.

Where possible, these measures should be made the object of research, designed to evaluate their safety and efficacy. In all cases, new information should be recorded and, where appropriate, published. The other relevant guidelines of this Declaration should be followed.

APS GUIDING PRINCIPLES IN THE CARE AND USE OF ANIMALS

Animal experiments are to be undertaken only with the purpose of advancing knowledge. Consideration should be given to the appropriateness of experimental procedures, species of animals used, and number of animals required.

Only animals that are lawfully acquired shall be used in the laboratory, and their retention and use shall be in every case in compliance with federal, state and local laws and regulations, and in accordance with the Institute for Laboratory Animal Research (ILAR) Guide for Care and Use of Laboratory Animals.1

Animals used in research and education must receive every consideration for their comfort; they must be properly housed, fed, and their surroundings kept in a sanitary condition.

The use of animals must be in accordance with the ILAR Guide for Care and Use of Laboratory Animals. Appropriate anesthetics must be used to eliminate sensibility to pain during all surgical procedures. Drugs that produce muscle paralysis are not anesthetics, and they must not be used alone for surgical restraint, but may be used in conjunction with drugs known to produce adequate anesthesia. The care and use of animals should be such as to minimize discomfort and pain. All measures to minimize pain and distress that would not compromise experimental results may be employed.

If the study requires the death of an animal, the most humane euthanasia method consistent with the study must be used.

When animals are used by students for their education or the advancement of science, such work shall be under the direct supervision of an experienced teacher or investigator.

---


Statement of Ownership, Management and Circulation
(Required by 39 U.S.C. 3689) PS Form 3526

1. Publication Title
   Journal of Applied Physiology

2. Publication No.
   8750-7587

3. Filing Date
   Sept. 30, 2007

4. Issue Frequency
   Monthly

5. No. Issues Published Annually
   12

6. Annual Subscription Price
   Member: $ 730.00
   Non-Member: $ 785.00

7. Complete Mailing Address of Known Office of Publication (Not Printer)
   9650 Rockville Pike, Bethesda, MD 20814
   Contact: Lucia Taylor

8. Complete Mailing Address of Headquarters or General Business Office of Publisher
   Same as Above
   Telephone: 301-634-7191

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do Not Leave Blank)
   Publisher (Name and Complete Mailing Address)
   American Physiological Society, 9650 Rockville Pike, Bethesda, MD 20814-3991

   Editor (Name and Complete Mailing Address)
   Jerome A. Dempsey, Dept. Population Health Sciences, University of Wisconsin-Madison, 504 N. Walnut St., Madison, WI 53706

   Managing Editor (Name and Complete Address)
   Margaret Reich, Director of Publications, 9650 Rockville Pike, Bethesda, MD 20814-3991

10. Owner: (If owned by a corporation, its name and address must be stated and also immediately thereafter the names and addresses of stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.) Do Not Leave Blank.

   Full Name
   Complete Mailing Address
   None

11. Known Bondholders, Mortgagors, and other Security Holders owning or holding 1 percent or more of total amount of Bonds, Mortgages, or Other Securities. If none, check here: X None

   Full Name
   Complete Mailing Address
   None

12. For completion by nonprofit organizations authorized to mail at special rates. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes: (Check one) If status has changed, publisher must submit explanation of the change with this statement.

   ☑ Has Not Changed During Preceding 12 Months
   ☐ Has Changed During Preceding 12 Months

13. Publication Name
   Journal of Applied Physiology

14. Issue Date for Circulation of Data Below
   August 2007

15. Extent and Nature of Circulation

<table>
<thead>
<tr>
<th></th>
<th>Average No. Copies Each Issue During Preceding 12 months.</th>
<th>Actual No. Copies Single Issue Published Nearest to Filing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total No. Copies (Net Press Run)</td>
<td>1777</td>
<td>1676</td>
</tr>
<tr>
<td>B1. Paid and/or Requested Circulation: Outside County Mail Subscriptions stated on form 3541 (Include Advertisers' proof and exchange copies)</td>
<td>1314</td>
<td>1269</td>
</tr>
<tr>
<td>B2. Paid In-County Subscriptions (Include Advertisers' proof and exchange copies)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B3. Sales through Dealers, Carriers, Street Vendors, Counter Sales, and other Non-USPS Paid Distribution</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B4. Other Classes Mailed Through the USPS</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>C. Total Paid and/or Requested Circulation (Sum of B1, B2, B3, and B4)</td>
<td>1314</td>
<td>1269</td>
</tr>
<tr>
<td>D1. Free Distribution by Mail (Samples, Complimentary or other) Outside County as stated on form 3541</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>D2. In-County as stated on form 3541</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>D3. Other Classes Mailed Through the USPS</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>D4. Free Distribution Outside the Mail (Carriers or Other Means)</td>
<td>61</td>
<td>13</td>
</tr>
<tr>
<td>E. Total Free Distribution (Sum of D1, D2, D3, and D4)</td>
<td>91</td>
<td>40</td>
</tr>
<tr>
<td>F. Total Distribution (Sum of C and E)</td>
<td>1405</td>
<td>1309</td>
</tr>
<tr>
<td>G. Copies Not Distributed (See Instructions in Publishers #4 (page 3))</td>
<td>372</td>
<td>367</td>
</tr>
<tr>
<td>H. Total (Sum of F and G)</td>
<td>1777</td>
<td>1676</td>
</tr>
<tr>
<td>I. Percent Paid and/or Requested Circulation (C / G x 100)</td>
<td>93.52%</td>
<td>98.94%</td>
</tr>
</tbody>
</table>

16. This Statement Of Ownership will be Printed in the December 2007 Issue of this Publication ☐ Check if not required to publish.

17. Signature of Editor, Publisher, Business Manager, or Owner
   [Signature]
   Date 9/30/2007

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).
THE APS JOURNAL LEGACY CONTENT is an “online package” of over 100 years of historical scientific research from 13 American Physiological Society (APS) research journals.

- It can be purchased separately at a one-time charge for perpetual use. This Legacy Content is **FREE to APS Members ($2,000 for nonmembers)**.
- It is a separate program from the Subscription Program in that you pay once for the perpetual access to the online content from all APS journals from 1898 to 1996-1998, depending on the journal (see chart below). This content goes back to the first issue of each of the APS journals—including the American Journal of Physiology, first published in 1898. This legacy content can be viewed as completely searchable scanned images of the printed pages.

<table>
<thead>
<tr>
<th>JOURNAL TITLE</th>
<th>LEGACY CONTENT DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Neurophysiology</td>
<td>Jan 1938 - Dec 1996</td>
</tr>
<tr>
<td>American Journal of Physiology (AJP)</td>
<td>Jan 1898 - Dec 1976</td>
</tr>
<tr>
<td>AJP-Cell Physiology</td>
<td>Jan 1977 - Sept 1997</td>
</tr>
<tr>
<td>AJP-Endocrinology &amp; Metabolism</td>
<td>Jan 1977 - Sept 1997</td>
</tr>
<tr>
<td>AJP-Gastrointestinal &amp; Liver Physiology</td>
<td>Jan 1980 - Sept 1997</td>
</tr>
<tr>
<td>AJP-Heart &amp; Circulatory Physiology</td>
<td>Jan 1977 - Sept 1997</td>
</tr>
<tr>
<td>AJP-Regulatory, Integrative &amp; Comparative Physiology</td>
<td>Jan 1977 - Sept 1997</td>
</tr>
<tr>
<td>AJP-Renal Physiology</td>
<td>Jan 1977 - Sept 1997</td>
</tr>
<tr>
<td>Advances in Physiology Education</td>
<td>June 1989 - Nov 1997</td>
</tr>
<tr>
<td>Physiological Reviews</td>
<td>Jan 1921 - Dec 1997</td>
</tr>
<tr>
<td>News in Physiological Sciences</td>
<td>Jan 1986 - Jan 1998</td>
</tr>
<tr>
<td>Physiological Genomics</td>
<td>Not applicable because first published in 1999</td>
</tr>
</tbody>
</table>

**PLEASE NOTE:** All online content published after the end dates for the journals above is free to all 12 months after publication.

**OVER 100 YEARS OF HISTORICAL SCIENTIFIC RESEARCH 1898-1998**

Journals of The American Physiological Society are participants in the Washington DC Principles for Free Access to Science (www.dcprinciples.org)
The American Physiological Society provides the full historical content of 13 research journals as one “online package” called the APS Journal Legacy Content. This content goes back to the very first issues of the American Journal of Physiology in 1898.

To commemorate this event, APS asked a group of expert authors to write essays on some of the most significant articles from the body of APS literature.

A Few Samples of the Classic Articles, listed below, have been singled out for essays written by eminent scientists with first-hand or personal experience in the field. All the essays and Classic Articles are free for viewing by all users at this web site: www.the-aps.org/publications/classics


You can order the full online set of Legacy Content for a one-time low price of $2,000 for perpetual use (FREE to APS Members). For more information, go online at: www.the-aps.org/publications/legacy
Animal research saves animals.
Get the facts about animal research at www.researchfacts.org.

An educational campaign from the Foundation for Biomedical Research © 2003
Ethical Policies and Procedures

Authorship

The Editors of the journals of the American Physiological Society (APS) expect each author to have made an important scientific contribution to the study and to be thoroughly familiar with the original data. The Editors also expect each author to have read the complete manuscript and to take responsibility for the content and completeness of the manuscript and to understand that if the paper, or part of the paper, is found to be faulty or fraudulent, that he/she shares responsibility with his/her coauthors. The Mandatory Submission Form, which is published in the journals, should be signed by each author. In cases in which obtaining a signature from each author would delay publication, the corresponding author’s signature is sufficient provided that the corresponding author understands that he or she signs on behalf of the other authors who have not signed the form. An author’s name can be removed only at his/her request, but all coauthors must sign a change of authorship agreement for any change in authorship (additions, removals, or change of order) to be made.

Author Conflict of Interest

Authors of research and other articles are required at the time of submission to disclose to the APS Publications Office any potential conflict of interest (e.g., consultancies, stock ownership, equity interests, patent-licensing arrangements) and that they accept full responsibility for the conduct of the study, had full access to all the data, and controlled the decision to publish. Failure to do so may jeopardize eventual publication. If disclosures are to be made, the author(s) will be asked to fill out a Conflict of Interest Disclosure form. The information provided in the form, unless already disclosed in the submitted article, will be held in confidence while the paper is under review. If the article is accepted for publication, information on the potential conflict of interest—including a lack of control of the decision to publish—will be included in the Disclosures section, following the Acknowledgments section.

Editor and Reviewer Conflict of Interest

Editors and Reviewers should avoid making decisions on papers for which they may have a personal or financial conflict of interest. Reviewers who are collaborating with the author, or who are working on very similar research, should recuse themselves from reviewing a paper for which they have a conflict. An Editor in Chief should have a Consulting Editor or Associate Editor make a decision on a paper for which he or she has a conflict. When an Editor in Chief submits a paper to his or her journal, the paper is automatically assigned to a Guest Editor, a Consulting Editor, or an Associate Editor, who will handle all aspects of the peer review of the paper. The reviews are handled outside the web-based peer review system, so that the Editor in Chief will not have access to them.

Duplicate Publication, Plagiarism, Falsification

The journals of the APS accept only papers that are original work, no part of which has been submitted for publication elsewhere except as brief abstracts. When submitting a paper, the corresponding author should include copies of related manuscripts submitted or in press elsewhere. Taking material from another’s work and submitting it as one’s own is considered plagiarism. Taking material (including tables, figures, and data; or extended text passages), from the author’s own prior publications is considered redundant publication or self-plagiarism, and is not permitted. Fabricating a report of research or suppressing or altering data to agree with one’s conclusions is considered fraud. This includes altering figures in such a way as to obscure, move, remove, or introduce information or features.

Prior Publication

Material published by the author before submission in the following categories is considered prior publication: 1) articles published in any journal; 2) articles, book chapters, and long abstracts containing original data in figures and tables, especially in proceedings publications; 3) widely circulated, copyrighted, or archival reports, such as the technical reports of IBM, the preliminary reports of MIT, the institute reports of the US Army, or the internal reports of NASA.

Doctoral dissertations that are made available by UMI/Proquest or institutional repositories are not considered prior publication. Data portions of submitted papers that have appeared on an author’s web site will be permitted, with the proviso that the author inform the Editor at the time of the submission that such material exists so that the Editor can determine the suitability of such material for publication. Failure to do so will result in an automatic rejection of the manuscript. Examples of such work include, but are not limited to, immunofluorescence micrographs and/or animated gif/video files posted on a web site, or NIH-mandated posting of DNA microarray data. After the article is published in a journal of the American Physiological Society, the data should be removed from the author’s web site.

Authors with concerns about possible prior publication that does not fall clearly into one of these categories should contact the Director of Publications and forward the material for examination.

Experiments Involving Animals or Humans

Authors using humans, animals, or fetal tissue in their experiments should refer to APS’s policies on those subjects. Links to these policies can be found at http://www.the-aps.org/publications/i4a/policies.htm.

Ethical Procedure

APS reviewers have a responsibility to report suspected duplicate publication, fraud, plagiarism, or concerns about animal or human experimentation to the Editor. A reviewer may recognize and report that he/she is refereeing, or has recently refereed, a similar or identical paper for another journal by the same author(s). Authors using humans, animals, or fetal tissue in their experiments should refer to APS’s policies on those subjects. Links to these policies can be found at http://www.the-aps.org/publications/i4a/policies.htm.

Readers may report that they have seen the same article elsewhere, or authors may see their own published work being plagiarized. In all cases the first action of the journal Editor is to inform the Publications Committee Chair through the Director of Publications by supplying copies of 1) the relevant material and 2) a draft letter to the corresponding author asking for an explanation in a nonjudgmental manner. The Publications Committee Chair must approve any correspondence with the author before it is sent to the author. If the author’s explanation is unacceptable and it seems that serious unethical conduct has taken place, the matter is referred to the Publications Committee. After deliberation, a decision is made whether the case is serious enough to warrant a ban on future submissions and/or if the offending author’s institution should be informed. The decision has to be approved by the Executive Cabinet of the APS Council, and the author has the right to appeal a sanction, with the opportunity to present his/her position, to the Publications Committee and the full APS Council.

If the infraction is less severe, the Editor, upon the advice of the Publications Chair, sends the author a letter of reprimand and reminds the author of APS publication policies; if the manuscript has been published, the Editor may require the author to publish an apology in the journal to correct the record. If, through the author’s actions, APS has violated the copyright of another journal, the Publications Chair writes a letter of apology to the other journal.

In serious cases of fraud that result in retraction of the article, a retraction notice will be published in the journal and will be linked to the article in the online version. The online version will also be marked “retracted” with the retraction date.

Updated July 2007.
WE ARE

PHYSIOLOGISTS

The Federation of American Societies for Experimental Biology is a coalition of life science societies dedicated to enhancing the quality of life through research. If you are a member of The American Physiological Society you—like more than 85,000 other scientists—are a member of FASEB. FASEB strives to provide support in public affairs, distinguished publications, invaluable meetings and conferences, and a variety of member services.

FASEB—we are life scientists and we work for you. www.faseb.org