Ethics: a Proposal to the Membership

On the advice of legal counsel to the ASM, the Committee on Ethical Practices (CEP) has revised both the Canons of Ethics and the Ethical Review Process (ERP) as printed below. The changes made in the canons and the ERP may be compared with the versions currently in effect, as published in ASM News (December 1985, p. 626 [Canons] and July 1985, p. 334 [ERP]).

The CEP was also requested by legal counsel to prepare guidelines for the interpretation of the Canons of Ethics. These guidelines are shown below in italics after the canon to which they pertain.

It has been interpreted by the CEP that the Canons of Ethics as subtended to the Code of Ethics of the ASM shall have the force of law in the Society and are to be enforced through the ERP. The Fundamental Principles of the Code of Ethics constitute the basis for the enforceable sections of the canons.

It is important to note that the CEP regards these guidelines as fluid. As experience with the ERP in applying the guidelines accumulates, it will be the responsibility of the CEP to update and change any portion which by use is seen to be inadequate.

The CEP requests comments on the following before submitting this proposal to the Council Policy Committee and the ASM Council at the Miami meeting in May 1988. Please direct comments to Jules V. Hallum, Committee on Ethical Practices, c/o ASM, 1913 I St. NW, Washington, DC 20006.

Code of Ethics of ASM

Fundamental Principles

Members of ASM accept that the following fundamental principles advance their profession and uphold its integrity and dignity.

1. They will use their knowledge and skills for the advancement of human welfare.
2. They will be honest and impartial in their interactions with the public, their employers, their clients, patients in whose diagnosis and treatment they are involved, their colleagues, their students, and their employees.
3. They will strive to increase the competence and prestige of the profession of microbiology by responsible action and by sharing the results of their research through academic, commercial, or public service.
4. They will endeavor to continue to expand their professional knowledge and skills, and they will support the aims of the societies of their discipline.

Canons

To these fundamental principles are subtended the following Canons of Ethics.

1. Microbiologists recognize a duty to the public to propagate a true understanding of science. They will avoid making statements known to be premature, false, misleading, or exaggerated and will discourage any use of microbiology contrary to the welfare of humankind. They will work for proper and beneficent application of scientific discoveries and will call to the attention of the public or the appropriate authorities misuses of microbiology or of information derived from microbiology.

This canon deals with the relationship of the profession of microbiology to the public. Its interpretation is therefore based on potentially damaging public actions or statements of the professional microbiologist.

a. "Premature, false, misleading, or exaggerated statements" are understood to mean statements known to be such and publicized intentionally despite such knowledge.

b. To "discourage any use of microbiology contrary to the welfare of humankind" is included as consistent with the ASM's official disapproval of the use of microbes as offensive military weapons, a position taken by the ASM Council (ASM News, August 1970, p. 10).

c. To "work for proper and beneficent application" of discoveries in microbiology is not intended to impose a requirement on microbiologists to initiate such applications, but to readily contribute to and cooperate with such programs.

d. The purpose of "will call to the attention of the public or the appropriate authorities misuses of microbiology..." in the canon is to emphasize the ethical imperative on microbiologists to "blow the whistle" when instances of misuses of microbiology are perceived, and further to protect and cooperate with those who perceive and complain of such practices.

The term "misuses" in this canon is intended to refer to premature, false, misleading, or exaggerated statements or to the use of microbes as offensive military weapons.

ERRATUM

In the August 1987 issue of ASM News (p. 433), the Amendments to the ASM Bylaws, Article VII, Divisions, Section 7, should read: "To establish a new division, a group of at least 150 members must petition the Council through the Secretary..."
2. Microbiologists are expected to communicate knowledge obtained in their research through discussions with their peers and through publications in the scientific literature.

This canon codifies the responsibility of research microbiologists to complete their experiments in the sense expressed in the dictum of Robert Day that "an experiment is not completed until it is published" (How to Write and Publish a Scientific Paper, ISI Press, Philadelphia, 1979, p. iv). The intent of this canon is to emphasize the responsibility of directors of research and of principal investigators for timely release of research reports that are essential to the progress of the careers of their associates, and equally their responsibility to inform their administrative superiors of progress within their research programs. The canon, however, applies equally at all levels of the research community.

3. In their scientific publications, microbiologists will strive for accuracy not only in the reporting and interpretation of their observations, but also in the proper citation of pertinent previous contributions by others.

This canon deals with two ethical considerations in publications: accuracy in reporting information and accuracy in citation of others' work.

The Publications Board of the ASM has published its Editorial Policy (ASM News, May 1987, facing p. 272). This canon is to be interpreted in accord with that policy.

"Proper citation of pertinent previous contributions by others" is meant to refer to appropriate and relevant citations, not necessarily exhaustive listings. The editors of each journal have the responsibility of determining the appropriate extent of citation.

4. Microbiologists will endeavor to recognize conflicts of interest and to avoid the abuse of privileged positions. Such privileged positions include, but are not limited to, (i) the review and evaluation of manuscripts and grant applications, (ii) evaluation of candidates for employment or promotion, (iii) ASM committee or staff positions, (iv) service in consulting activities, (v) access to specimen materials and information regarding their sources, (vi) student guidance, and (vii) simultaneous service in profit-making and not-for-profit organizations.

This canon deals with conflicts of professional interest and the use of privileged positions. The canon is sufficiently illustrative of the meaning of "privileged position." Conflict of interest is interpreted to refer to the intentional use for one's personal or professional advantage of information or materials gathered through service in a privileged position.

5. Microbiologists recognize their responsibility to make available to other members of the profession the unique materials that were the source of published data, so far as this does not infringe upon proprietary rights.

The ASM Publications Board has a stated policy regarding the responsibility of investigators to make available to other microbiologists strains described in ASM publications (ASM News, May 1987, facing p. 272). This canon has the purpose of making this responsibility an ethical responsibility and one that applies as well to strains and other materials described in journals other than ASM publications.

This canon does not apply to distribution of those strains whose control is restricted by proprietary responsibilities.

6. Microbiologists recognize responsibilities to students, technicians, and other associates working under their supervision to consider them colleagues, to provide training where required, and to assign appropriate recognition for their contributions. By direction and example these colleagues should be taught adherence to the ethical standards herein described.

The purpose of this canon is to emphasize that the responsibility of a senior microbiologist to students, technicians, and other associates is an ethical responsibility. Recognition of the contributions of these associates is required under this canon, as is the responsibility of the senior microbiologist to make provision for the training needed for their contributions. For example, the inadequacy of technical competence on the part of a student or technician is not to be regarded as an excuse for faulty results reported by the senior microbiologist. The implication is clear by this canon that the reliability of results obtained in a laboratory is the direct responsibility of the senior microbiologist.

7. Members shall not represent any position as being that of ASM unless that position has been approved by the appropriate unit of ASM.

Canons 7, 8, and 9 are self-explanatory.

8. Members of ASM recognize ASM's responsibility to consider breaches of this Code of Ethics and to recommend appropriate responses. These responses are defined by the ERP (ASM News, July 1985, p. 335).

9. Microbiologists accepting membership in ASM by that action agree to abide by this Code of Ethics.

Ethical Review Process

Step 1: Complaint. Allegations of ethical misconduct must be sent by letter, marked confidential, to the President of the ASM: This letter should include a description of the alleged behavior, information in support of the allegation, and citation of the canon(s) deemed violated.

Step 2: President's Responses to a Complaint. The President of ASM shall determine, on the basis of evidence from the complaint, and in consultation with the CEP, whether the alleged conduct would constitute a violation of the ASM Code and Canons. If it is deemed that the facts, as alleged, would not constitute a violation, the President shall dismiss the complaint at this point.

If it is deemed that the conduct, as alleged, would constitute an ethical violation, the President shall appoint a panel to investigate the allegations, according to the Guidelines.
to the ERP. At this point, the President shall notify the accuser and the accused that an investigation has been initiated. Both parties are thereby directed to prepare evidence for presentation to the panel.

**Step 3: The Investigative Panel.**

The investigative panel will consist of a minimum of three (3) ASM members. The panel shall have full authority to investigate the validity of the allegation and of the defense against the allegation.

At the conclusion of its investigation, the panel shall report only to the CEP. Its report will consist of the full record of the complaint and its investigation, a synopsis of the findings of the panel on which their recommendations are based; a recommended decision as to whether an ethical violation occurred or alleged, and a recommended action on the part of ASM, which may include dismissal of the complaint. A majority of the panel must agree to the recommendations.

**Step 4: Decision by the Committee on Ethical Practices.**

Upon receipt of the report of the investigative panel, the CEP will review the entire report. On the basis of the report and its own deliberations, the CEP will render a decision and report that decision to the President of ASM. This decision will include a synopsis of the complaint and its investigation, a decision as to whether an ethical violation occurred, and an order of action to be taken by ASM. The action may include dismissal of the complaint.

All materials, other than its report to the President, remain with the CEP.

A quorum of the CEP will be required to conduct the review. The decision of the CEP will require agreement by a two-thirds vote of the participating CEP members.

**Step 5: Notification of the ASM Decision.**

Upon receipt of the decision and order of action from the CEP, the President of ASM shall promptly and in confidence notify all parties in writing of the decision and order of action. In that same notification, if the decision is other than dismissal of the complaint, the accused will be notified of the right to appeal.

**Step 6: Right of Appeal.**

Written notice of intent to appeal must be received by the President of ASM within thirty (30) days of receipt of the notice of decision. If such notification is not received, the decision of the CEP will be carried out.

The appeal may be based on claims that the decision was incorrect in light of the evidence presented and/or that the procedure was flawed in the particular case investigated. Arguments supporting the appeal must be received by the President within ninety (90) days of receipt of the notice of decision.

If an appeal is made, the President shall request the ASM Council to appoint an Appeal Committee consisting of at least five Council members. The CEP will release to the Appeal Committee the entire record.

The Appeal Committee will review the record and render its own decision and order of action. Two-thirds of the Appeal Committee must agree to the decision and order of action. Reversal of the decision of the CEP by the Appeal Committee shall be based on the conclusion that the original decision was not supported by substantial evidence, that the original decision was clearly erroneous, or that due process had not been followed. The decision and order of action will be communicated to the President, and all materials will be returned to the CEP.

Upon receipt of the report of the Appeal Committee, the President shall promptly notify all parties of that decision and order of action.

In the case of removal from membership or requested resignation, the name of the member and the decision applied will be published in *ASM News*. In the case of dismissal of charges, the accused shall be given the choice of whether that decision is published.

The decision and order of action will be the final disposition of the matter by the ASM.

**Confidentiality.** It is important in any investigation of alleged ethical misconduct that all aspects be treated in a strictly confidential manner. All elements of the investigation, including the fact that an investigation is proceeding, will be known only to the participants. Breach of this confidentiality shall itself be considered ethical misconduct.

This confidentiality shall be maintained until thirty (30) days after receipt of notice of decision from the President of ASM. In the event of an appeal, this confidentiality shall be extended until thirty (30) days after notification by the President of the results of the appeal.

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**NRM Task Lists Emerge as Valued Study Guides**

The National Registry of Microbiologists (NRM) now has available the revised Selected Task Lists for the Registered Microbiologist (RM) (AAMI) certification examinations. The lists serve a multitude of purposes as the NRM strives to promote recognition of qualified microbiologists.

**History of the Task Lists**

In 1982 and again in 1985, National Evaluation Systems, Inc. (NES), worked closely with the ASM in completing a multiphase examination development project aimed at validating the certification examination content. NES is a test development and evaluation company specializing in the design and administration of customized tests for educational agencies, professional associations, and businesses.

The result of the NES/ASM collaboration was a series of Task Lists, each of which represented survey results from approximately 2,100 laboratory microbiologists. By the use of these surveys, laboratory tasks were ranked in order of importance for each of the specialty areas of interest. The end results were Selected Task Lists consisting of 65 tasks each.

In the late spring of 1987, 21 microbiologists from 10 states gathered in Washington, D.C., to update the Selected Task Lists for the three Registered Microbiologist certification examinations. Representing government, academia, and private
ERRATUM

During the 1988 ASM Annual Meeting, the ASM Council reviewed the revised Code of Ethics of ASM and the Ethical Review Process (ERP) as published in the November 1987 issue of the ASM News. The Council voted to accept the Code and Review Process with a change in a single word in Canon 2, from "expected" to "encourage!"
The following guidelines are used by the Publications Board in considering ethical standards:

1. All the authors of a paper are equally responsible for the content of the submitted paper and for any breach of ethical conduct involving the paper. Any action taken by the Publications Board as a result of such a breach would be applied to all authors equally.

2. Plagiarism in any form is regarded as a very serious breach of ethical conduct, and its detection will result in action as described below.

3. Duplicate publication of data is not allowed. If an author considers the inclusion of a few items of published data to be essential to the manuscript, the first publication must be cited, copyright permission must be obtained from the first journal, if necessary, and an explanation must be provided for including the previously published data.

4. If a personal communication is cited, the author must have written permission from the individual cited, including a statement approving the manner in which the personally communicated information is used in the paper.

5. Failure to cite another's work when appropriate is an all too common phenomenon. Because there are various degrees of seriousness in the omission of citations, the Publications Board has provided an opportunity for authors to correct the record by publishing an author's correction (see ASM News 49:332, 1983).

6. The editor in chief of each journal is responsible for investigating any charges that might arise from the publication of a paper in his or her journal. Each author is requested to respond to any accusation concerning ethical conduct in writing. After thorough review of the documentation, a decision on the proper action is determined jointly by the editor in chief, the chairman of the Publications Board, and the director of publications. Every precaution will be taken to maintain the confidentiality of the investigation and its outcome.

7. Any proven violation of the policies on ethics may result in action ranging from a written reprimand to a 3-year prohibition against submitting papers to any ASM journal by any of the authors of the paper. In the most serious breaches of ethical conduct, formal action may be taken by an Ethics Committee or by the elected officers of ASM in accord with Article III of ASM's constitution.

8. An author who has been found guilty of a serious breach of ethical conduct may appeal in writing to the chairman of an Ethics Committee or to the elected officers of ASM.

Editors in chief, editors, editorial board members, ad hoc reviewers, and the ASM Publications staff are aware of their ethical obligations to authors, subscribers, ASM members, and the scientific community as a whole. It is the collective responsibility of all who handle submitted papers to ensure impartial and expeditious review of manuscripts, protection of author's proprietary interests, publication of manuscripts within a reasonable period of time, diligent adherence to copyrighting standards, and equal treatment of all authors.

The peer review system of evaluating manuscripts submitted to primary research journals, especially those published by not-for-profit scientific societies, has served exceedingly well for more than a century. One of the main reasons for the success of this system has been its understanding by all parties that the published information is original, that the experiments are repeatable, and that there is sufficient novelty to advance knowledge. One of the most important functions of a scientific society such as ASM is the advancement of its discipline. This is best accomplished by the establishment and maintenance of the highest professional standards, and nowhere are these standards more important than in the publication of research journals.

Helen R. Whiteley
Chairman, Publications Board

Walter G. Peter III
Director, Publications

JB Annual Report

The year 1983 was an excellent one for the Journal of Bacteriology (JB). The number of manuscripts received has stayed essentially the same for almost 10 years, although changes in the editors' bookkeeping practices may be keeping it down. It had been the custom to assign a new number when two manuscripts were merged; now we often retain a number. Frequently in the past, papers were turned down "in their present form," but resubmission of substantially improved papers was encouraged. The current crew of JB editors seems more likely to retain open file numbers even for substantially altered manuscripts. This is important, since the number of papers published has gone up in each of the last 2 years (Table 1), and we do not wish this increase to result from lowered standards. The general, but

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