INSTRUCTIONS FOR AUTHORS

Cancer Research, an official journal of the American Association for Cancer Research, Inc. (AACR), is devoted to the publication of significant, original studies in all areas of basic, clinical, translational and epidemiological cancer research. Such studies include: biochemistry; biophysics; chemical, physical, and viral carcinogenesis and mutagenesis; clinical investigations including clinical trials; endocrinology; epidemiology and prevention; experimental pathology; experimental therapeutics; immunology and immunotherapy including biological therapy; molecular biology and genetics; physiology; radiobiology and radiation oncology; tumor biology; and virology.

Papers are stringently reviewed, and only those that report results of novel, timely, and significant research and meet high standards of scientific merit will be accepted for publication.

CATEGORIES OF PUBLICATION

The following types of material will be considered for publication:

(1) Research articles that report original experimental, clinical, translational or epidemiological studies relating to cancer, which are well documented, novel, and significant. These articles are published within an average of 60 days from their acceptance.

(2) Advances in Brief, which are short, definitive reports of highly significant and timely findings in the field. These submissions receive very rapid review and, if acceptable, are published within an average of 10 weeks from receipt. Those deemed to be of the highest scientific merit and priority appear in print within 6–7 weeks of their receipt. Advances should be approximately 3 printed pages in length (about 12 double-spaced typewritten pages), containing an Abstract of about 100 words, a one-paragraph introduction, an abbreviated Materials and Methods section, Results and Discussion sections (which may be combined), a maximum of 20 references, and no more than 4 items for the display of data (any combination of figures and tables).

(3) Perspectives in Cancer Research, which are invited articles presenting fresh insights on either a very active or underdeveloped area of research and viewpoints on where research in that area may or should be heading.

(4) Concise reviews on subjects of timely and importance to cancer researchers. Authors of unsolicited reviews should submit an outline of the proposed article for approval by the Editorial Board. If submission of the complete article is encouraged, the review will be given particularly stringent editorial evaluation before acceptance.

(5) Public Issues, which are brief reports on topics of interest to cancer researchers and the general public; these might include articles on funding for cancer research, training in the field, public education, science education, etc.

(6) Letters to the Editor, offering considered opinions on manuscripts published in the Journal. Correspondence concerning articles that have not been published in Cancer Research will not be considered.

(7) Brief meeting reports on symposia and conferences on cancer research. These reports should be submitted within 3 months of the meeting date in order to maintain their timeliness and should comprise no more than 3 printed pages (approximately 12 double-spaced typewritten pages) and include a statement of the purpose(s) of the meeting, an integrated summary of the findings presented, and recommendations for future research. The names and affiliations of key speakers may be included if space is available.

(8) Proceedings of symposia, published as external supplements to the Journal (Supplements to Cancer Research), the full expenses of which are assumed by the sponsoring agency. These proceedings are accepted for publication at the discretion of the Editor-in-Chief. Stringent acceptance criteria will be imposed.

(9) Brief announcements of scientific meetings and of courses in cancer-related biomedical science of interest to our readers. These should be submitted at least 3 months prior to the expected month of issue.

(10) Brief listings of recent deaths of distinguished contributors to the field of cancer research.

EDITORIAL POLICIES

Submission of a manuscript to Cancer Research implies that the author(s) of the paper understand and fully accept the policies of the Journal as detailed in these "Instructions for Authors.

When a manuscript is submitted for consideration, the authors should confirm in writing that neither the submitted paper nor any similar paper, other than an abstract or preliminary communication, has been or will be submitted in any other primary scientific journal. Once an article is accepted for publication in Cancer Research, the information therein is embargoed from reporting by the print media until the Journal's issue date and embargoed from reporting by all other media until 6 p.m. (EST) the evening before the issue date.

It is also understood that all authors listed on a manuscript have agreed to its submission and content. For revised manuscripts, if an author is deleted or a new author is added, it is the responsibility of the corresponding author to provide the Publications Department with written documentation at the time of submission that the authors involved are aware of and agree to the changes in authorship. Cancer Research accepts no responsibility for such changes.

The Journal maintains an international editorial board of Associate Editors with broad expertise in all areas of cancer research. These Associate Editors, along with a large group of external reviewers, provide fair and thorough evaluations of papers submitted to Cancer Research. When reviewing manuscripts, the Associate Editors and reviewers are expected to adhere to a strict code of ethical conduct in the review of scientific literature. This code mandates that the confidentiality of the material under review be maintained. Further details on appropriate conduct for Editors and reviewers can be found in Ethics and Policy in Scientific Publications (First Edition, 1992, published by the Council of Biology Editors, Inc., Northbrook, IL 60063).

Journal policy requires that authors, reviewers, and Associate Editors reveal to the Editor-in-Chief any relationships that they believe could be construed as causing a conflict of interest with regard to the manuscript submitted for review. Submission of a manuscript implies acceptance by all authors of the strict policy of the Journal that under no circumstances will the identities or information leading to the identities of the Associate Editors and reviewers be revealed.

Every effort is made to render editorial decisions promptly, consistent with thoroughness of review. Inquiries regarding the status of manuscripts should be submitted in writing. Collect telephone calls from authors cannot be accepted.

SUBMISSION FEE AND PAGE CHARGES

A nonrefundable submission fee of $75 is assessed for each manuscript and must be paid regardless of the decision rendered on the paper. Payment must be made at the time of submission either by check (drawn on a U.S. bank) payable to the AACR, Inc., or by credit card (Visa, Mastercard, Eurocard, or American Express). To pay by card, include the card number and expiration date in the covering letter accompanying your manuscript. Credit card payment is preferred for submissions from outside the U.S. Note: We will no longer accept purchase order payment for the manuscript submission fee.

A page charge of $75 per printed page will be levied on all manuscripts accepted for publication. It is understood at the time of submission that the author(s) agree to pay this charge in the event of publication. Please refer to the section entitled "Publication Fees and Reprints" on p. 191 for further details regarding payment of this fee. Under exceptional circumstances, when no other source of grant or other support exists, the author(s) may apply to the Editor-in-Chief at the time of submission for a waiver of the page charges. All such applications must be countersigned by an appropriate institutional official stating that no funds are available for the payment of page charges.

PROCESSES FOR SUBMISSION

Contributions should be addressed to: Dr. Carlo M. Croce, Editor-in-Chief, Cancer Research, AACR, 150 S. Independence Mall West, Public Ledger Bldg., Suite 816, Philadelphia, PA 19106-3483; Phone: (215) 440-9300; FAX: (215) 440-9354. The paper should be submitted by an author, preferably the senior author, who should indicate in a covering letter:

(1) that the paper is being submitted for consideration for publication in Cancer Research;
(2) the exact address to which all related correspondence should be sent and the telephone and FAX numbers at which the author can be reached;
(3) credit card number, expiration date, and an authorized signature, if paying submission fee by credit card;
(4) that neither the submitted paper nor any similar paper, other than an abstract or preliminary communication, has been or will be submitted to or published in any other primary scientific journal;
(5) that all of the authors are aware of and agree to the content of the paper and their being listed as an author on the paper;
(6) that authorization has been given to use any information conveyed by either personal communication or release of unpublished experimental data;
INSTRUCTIONS FOR AUTHORS

(7) the salient and novel findings of the paper in a concise paragraph;
(8) the subject category that applies to the manuscript (please choose one only):

Biochemistry and Biophysics
Carcinogenesis
Clinical Investigations
Endocrinology
Epidemiology and Prevention
Experimental Therapeutics
Immunology
Molecular Biology and Genetics
Tumor Biology
Virology

[The final category assignment of an issue in an issue’s Table of Contents is at the discretion of the Editors.]

(9) five key words describing the paper, to assist in the selection of the Associate Editor and reviewers.

Authors may suggest appropriate Associate Editors (the names of whom are listed in the front of each issue of Cancer Research) and reviewers to whom the manuscript could be assigned. Full addresses of suggested reviewers should be provided. Please note that final assignments are at the Editor-in-Chief’s discretion.

Original submissions must include:
(1) The author’s covering letter in duplicate containing the above information.
(2) Four copies of the manuscript and four sets of original illustrations. Indicate which set of original illustrations should be used by the printer in the event of publication.
(3) Papers in press or submitted for publication that are highly relevant to the manuscript under review.

Revised manuscript submissions must include:
(1) A covering letter in duplicate, clearly indicating what alterations have been made in response to the criticisms raised. Satisfactory reasons should be given for noncompliance with any of the reviewers’ recommendations for revision.
(2) Four copies of the revised version of the manuscript, plus a red-marked copy of the manuscript indicating the changes made, and four sets of original illustrations.
(3) A disk of the revised version of the manuscript to expedite typesetting the article in the event of publication. The disk must be accompanied by a completed Disk Submission Form, which can be found in the back of each issue of Cancer Research. (See “Typesetting from Disks” section later in these Instructions for further details.)

Note: For both original and revised submissions, we cannot guarantee that manuscripts and illustrations will be returned to the author.

Authors are advised that the revised version of their manuscript is likely to undergo another review if the original submission required extensive changes. Authors of regular research articles are asked to submit their revised versions within 3–4 weeks from the notification of the decision on a manuscript, while authors of Advances in Brief are asked to resubmit within 2 weeks. The Editors acknowledge that a longer period of time might be needed to make the revisions in some cases. However, if a revised manuscript is not received within six months from the date of its original receipt, the resubmission may be considered a new manuscript and it will be subject to all of the conditions of an original submission.

Manuscripts that have been declined for publication will be reconsidered at the Editor-in-Chief’s discretion. An author of a rejected manuscript who wishes to resubmit must send a paper that has been revised in response to the criticisms, along with a covering letter in which the revisions are described. The manuscript identification number of the previous submission should be referenced in the covering letter. If the Editor-in-Chief determines that the paper can be reconsidered, it will be assigned a new manuscript identification number, the author will be charged a new manuscript submission fee, and the paper will undergo review as a new submission.

The Editors cannot determine a priori whether a paper will be acceptable after revision. Therefore, a letter from the author that merely describes intended revisions will not be acted upon.

FORMAT AND STYLE

Papers should conform strictly to Journal style. A recent issue of Cancer Research will provide authors with assistance in the proper arrangement of papers. Manuscripts are to be written in clear, grammatical English. Papers that are not in Cancer Research style or that are not in good idiomatic English will be returned to the author without review. Laboratory jargon as well as terminology and abbreviations not consistent with internationally accepted guidelines should be avoided.


Data must be presented concisely. Large masses of data of peripheral significance to the main thesis of the investigation will not be published in Cancer Research but may be deposited with the National Auxiliary Publications Service, c/o Microfiche Publications, P.O. Box 3513, Grand Central Station, New York, NY 10163-3513; Phone: (516) 481-2300; FAX: (516) 481-6213. The manuscript should contain a footnote that indicates how this ancillary material can be obtained. Such data should be submitted for review along with the manuscript.

The manuscript should be typed on 21.6 × 28-cm (8½- × 11-inch) paper with double spacing throughout, allowing for ample margins. Manuscripts typed single-spaced or with typing on both sides of the page will be returned to the authors. Consecutive numbering of all pages is required, with the title page as page 1. The typescript should be arranged in the following order: (a) title, (b) author(s) and complete name(s) and location(s) of institution(s) or laboratory(es), (c) running title, (d) key words, (e) footnotes, (f) text and references, (g) tables, (h) legends for all illustrations, and (j) other material. Numbered and lettered sections in the text should be avoided. The appropriate location for each table and illustration should be indicated by marginal notes. Simple chemical formulas or mathematical equations should be presented in a form that allows their reproduction in single horizontal lines of type; more complicated mathematical formulas or chemical structures difficult to set in type should be provided for reproduction in the form of line drawings or glossy photographs.

Title. Titles should be brief but informative, and limited if possible to about 100 characters. It is important for literature retrieval to include in the title the key words necessary to identify the nature of the subject matter, including, if applicable, the species on which the work is done. Use of expressions such as "Studies on . . . " or "Observations of . . . " should be avoided, since they are not informative. Chemical formulas or abbreviations should not be used. Also, do not use Roman or Arabic numerals to designate that the paper is one in a series (see section below on Footnotes).

Authors and Their Affiliations. Authors are urged to include their full names, complete with first and middle names or initials. Confusion often arises in the literature when authors are identified by surname and initials only. Authors’ academic degrees should not be included. The full names of institutions and subsidiary laboratories should be given, together with a useful address (including postal code). If several authors and institutions are listed on a paper, it should be clearly indicated with which department and institution each author is affiliated.

Running Title. A brief running title should be provided, not to exceed 50 characters. Running titles in the form of declarative or interrogative sentences are not acceptable.

Key Words. On the title page, provide five key words identifying the nature of the subject matter.

Footnotes. Lengthy footnotes are discouraged since the same information can in most instances be presented more effectively in the text.

Footnotes to the title page and text are to be designated consecutively with superscript Arabic numerals. A footnote to the title should contain information on financial support, including the source(s) and number(s) of the grant(s). If the paper is one of a series, a footnote to this effect may be included. Authors should also include a footnote designating to whom reprint requests should be addressed. An all-inclusive abbreviation footnote should contain a definition for every nonstandard abbreviation used in the paper.

For footnotes to tables, see section on Tables below.

Abstract. The abstract, to appear at the beginning of the paper, should be concise, yet indicative of the content of the paper. As abstracts are often copied directly by the secondary services, they should recapitulate in abbreviated form the purpose of the study and the experimental technique, results, and interpretations of the data. Data such as the number of test subjects and controls, strains of animals or viruses, drug dosages and routes of administration, tumor yields and latent periods, length of observation period, and magnitude of activity should be included. Vague, general statements such as "The signifi-
cance of the results is discussed," or "Some physical properties were studied," are uninformative and not acceptable. All important terms relevant to the content of the paper should be incorporated into the abstract to assist indexers in the derivation of key words. Abbreviations should be kept to an absolute minimum; however, if they are needed, they must be properly identified so as to make the abstract independent of the text. Authors may wish to keep in mind that MEDLINE, the computerized bibliographic prepared by the National Library of Medicine, includes only those abstracts that contain fewer than 6,000 bytes (or approximately 400 words).

**Introduction.** It is not necessary to include all of the background literature in this section. Brief reference to the most pertinent papers generally suffices to acquaint the reader with the findings of others in the field and with the particular problem or question addressed by the authors.

**Materials and Methods.** Explanation of the experimental methods should be brief but adequate for repetition by qualified investigators. Procedures that have been published previously should not be described in detail but merely cited in appropriate references. Only new and significant modifications of previously published procedures need complete exposition. The sources of special chemicals or preparations used should be given along with their locations (city and state (country, if foreign)).

This Journal endorses the principles embodied in the Declaration of Helsinki and expects that all investigations involving humans will have been performed in accordance with these principles. In particular, papers reporting human experimentation must include a statement that the human investigations were performed after approval by a local Human Investigations Committee and in accordance with the guidelines set out by the Helsinki Declaration of the Department of Health and Human Services, where appropriate. Also, papers reporting biomedical research involving human subjects must include a statement that informed consent was obtained from each subject or subject's guardian. To obtain a copy of the Helsinki Declaration, please contact the World Medical Association, Bôthe Postale 63, 01212 Ferney-Voltaire Cedex, France.

Further, the Journal is a staunch supporter of the most humane treatment of animals in the conduct of scientific studies. For animal experimentation reported in this Journal, it is expected that investigators will have observed the Interdisciplinary Principles and Guidelines for the Use of Animals in Research, Marketing and Education issued by the New York Academy of Sciences' Ad Hoc Committee on Animal Research, a copy of which is available for $5.00 from the Marketing Department, New York Academy of Sciences, 2 E. 63rd Street, New York, NY 10021-7289; Phone: (212) 838-0230. Only results of such experiments, including photographic presentation of data, in which proper attention has been given to experimental ethical considerations toward animals will be published.

**Results.** This section should include a concise textual description of the data presented in tables and illustrations. Excessive elaboration of data already given in tables and illustrations should be avoided. The Results and Discussion sections should be combined if, by so doing, space is saved or the logical sequence of the material is improved.

**Discussion.** In this section, the data should be interpreted concisely without repeating material already presented in the Results section. Speculation is permissible, but it must be well founded.

**References.** Number references in the order of their first mention in the text. Include all authors for the reference; do not use "et al." References should be typed in double-spaced form to facilitate copy editing. The bibliography should be limited to only those citations essential to the author's presentation. When comprehensive review articles are available, they are preferred to many separate references.

Before submission of the paper authors should verify the accuracy of all references and should check that all references have been cited in the text. Cancer Research style requires that all authors, complete titles of articles, and inclusive page numbers be supplied in the reference list. Examples of the two most common types of Journal references are:


Journal articles and serial compendia. The complete title, journal, volume number, inclusive pages, and year of publication should be given. Serial compendia, such as Advances in Cancer Research and the Annual Review of Biochemistry, which appear annually in numbered sequence, should be cited as journals rather than books, thus omitting the names of publishers and editors. Serial Sources for the BIOSIS Previews Data Base (Volume 1996) should be consulted for abbreviations of journals and serials.

Books and chapter citations. Citation of a specific chapter or article in a book should carry the author(s) of the chapter, its title, editor(s) of the book, book title, edition, volume, inclusive pages of the chapter, location and name of the publisher, and year of publication. For references to complete books, give all of the above information that is pertinent.

**Papers in press.** Papers in press may be listed among the references with the journal, name, and tentative year of publication.

Unpublished material. Papers in preparation or submitted for publication, unpublished data, and personal communications should be cited in a footnote, not in the Reference section. The names of all authors should be given, along with manuscript titles if possible.

**Addenda.** Data acquired after acceptance of the paper, by the authors themselves or by others, cannot be added to the text. An addendum may be added in proof; however, it is subject to approval by the Editor-in-Chief and could result in delay of publication. Addenda should be kept extremely brief.

**Tables.** Tabular material should not duplicate data already presented in the charts. Unnecessary columns of data that can easily be derived from the rest of the results in the table should not be included. Large groups of individual values should be avoided; instead, these should be averaged and an appropriate designation of the dispersion such as standard deviation or standard error included.

**Authors are obliged to indicate the significance of their observations by appropriate statistical analysis.**

Every table must have a descriptive title and an explanatory paragraph that clearly gives the experimental details for understanding by the reader without reference to the text. Each column must carry an appropriate heading and, if numerical measurements are given, these units should be added to the column heading. Tables should be numbered with Arabic numerals and table footnotes should be indicated with superscript italic letters (a,b,c...). All units of measurement and concentration should be clearly designated. Exponential terminology is discouraged (the term mN is preferable to 10−3 M).

If exponentials are absolutely unavoidable in column headings, the quantity expressed should be preceded, not followed, by the power of 10 by which its value has been multiplied, i.e., 10−3 X concentration (m). This will prevent confusion as to whether the quantity should be multiplied or divided to obtain the correct value.

**Illustrations.** Both line drawings (graphs) and half tone illustrations (photographs, photomicrographs, electrophoretic patterns, etc.) should be designated figures.

Figures should be used when salient points need illustration for better comprehension by the reader. Halftones are particularly expensive to reproduce and only those absolutely essential to the clarity of the presentation should be included. Straight-line functions such as relationships between concentration and absorbance, or Lineweaver-Burk plots when these are linear, should be described in a few lines in the text.

Each figure should be labeled in pencil with the first author's name and the figure number on an adhesive label on the reverse side. For halftones, the top of the figure should also be labeled.

Legends are required for all figures. They should briefly describe the data shown; details in the text should not be repeated. Staining should be included for halftones, where applicable. Each legend should adequately identify all symbols, abbreviations, mathematical expressions, abscissas, ordinates, units, and reference points used on the figure.

**Line drawings**, including flow diagrams and complex biochemical structures, should be prepared professionally (not simply typewritten). Illustrations should be provided on high-quality, smooth, opaque white paper or ordinary white bond paper. Tracing or textured papers are not acceptable. Illustrations should not be mounted on heavy cardboard. Clear, glossy prints are acceptable in lieu of original drawings, provided that all parts of the illustration are in focus. X-ray films or Polaroid photographs are not acceptable. If original drawings are submitted, they should not be larger than 21.6 × 28 cm (8½ × 11 inches).

Computer-generated graphs are acceptable provided that their quality adheres to the same standards as those produced by other means, e.g., all labeling must be clear and scaling must be in the proper proportion to reproduce legibly when reduced.

Except for especially complicated drawings showing large amounts of data, all line drawn illustrations are published as one-column width (8.9 cm or 3½ inches) or less. It is recommended that they be submitted in one-column size. If larger ones are submitted, it is the responsibility of the author to see that the abscissas, ordinates, lines, and especially the symbols are sufficiently large to permit reduction. When the graphs are reduced to the size of a single column, the letters and numbers must be at least 6 points and no larger than 12 points, and all symbols on the illustration must be discernible or the drawing will be returned to the author for correction. Do not use gray shading or screening in any graphs, particularly bar graphs. Gray does not reproduce well, especially
if reduction is required. Use patterns consisting of solid black and white first. If further distinctions need to be made among elements on an illustration, use horizontal, vertical, diagonal, or cross-hatched lines. The thickness of ruled lines on graphs is also vital for clear presentation of the data. Avoid using fine, broken, or dotted lines.

The symbols should be defined in the legend. Only those common symbols for which the printer has type (×, O, •, □, Δ, A, ©) should be used. Lines connecting the symbols should not extend beyond the data points.

Graphs should be ruled off close to the area occupied by the curve, and abscissas and ordinates should be clearly marked with appropriate units. Explanations of the coordinates should not extend beyond the respective lines. Do not box-in graphs with top and right-hand frame lines unless these are essential for reference. Titles printed outside the confines of the drawing waste space; all of this information should be included in the legend. Also, to conserve space those curves that may appropriately appear together should be included in a single graph.

The use of exponentials for labeling coordinates in graphs is considered ambiguous and should, if possible, be avoided. If exponentials must be used, the quantity expressed should be preceded by the power of 10 by which its value has been multiplied, i.e., 10\(^{-x}\) concentration (mM). The form “Concentration (m \times 10\(^{-x}\)) is not acceptable. If powers of 10 are used, the legend should designate how the quantity is to be calculated (whether multiplied or divided) to give the correct value.

Half tone illustrations should be submitted unmounted and trimmed to exclude all but essential material. The set of half-tone illustrations intended for the author’s use must be made from original negatives, i.e., they must be first generation glossy prints. Photographs made from other prints are not acceptable for reproduction. Karyotypes should be presented in the form of cardboard plates onto which chromosome sections from an original photomicrograph are pasted.

All halftones will be published at either 1(3/4")- 1(1/4")- or 2(7/8")-column widths and placed as close as possible to their first citation in the text. Halftones must be prepared within these dimensions if they are to be reproduced without reduction; otherwise, they will be reduced to conform to these widths.

Figure numbers should not be included on the face of the illustration. However, halftones that must appear together for comparison should be grouped under one figure number with each section lettered “A,” “B,” “C,” etc., in the upper left-hand corner on the face of the illustration. Composite figures may be mounted on a plate, with the sections butt side by side and tooling (thin white lines) placed between the parts of the figure. For optimal reproduction, the contrast among photographs on a plate should be consistent.

The overall dimensions of photographs on a plate should not exceed 18.4 × 22.4 cm (7¼ × 9 inches). The minimum dimensions to which the plate can be reduced must be indicated on the back.

Symbols, arrows, or letters used in photomicrographs should contrast with the background. If pressure-sensitive labeling such as Chartpak, Letraset, or Preprint is used, tissue overlays should be placed on the halftone to prevent the lettering from chipping away. In general, tissue overlays are recommended to protect the surface of halftones. The important areas of the photomicrographs that must be reproduced with greatest fidelity should be indicated on overlays.

Internal scale markers should always be included on the photographs themselves as opposed to listing magnification in the legend since it may be necessary to reduce the figures. Magnifications given in the legend will reflect size before reduction.

Color photographs. Authors are encouraged to submit color illustrations. The expense of reproducing color photographs must be offset partially by the author. In 1997, the cost of color reproduction charged to authors will be $975 per color image. If the illustration is a composite figure, the parts should be mounted together in an space-saving arrangement as possible. All color illustrations must be submitted on flexible backing, including mounted composite figures. Please note that the author is responsible for submitting prints that are of sufficient quality to permit accurate reproduction, and for approving the final color proof. Cancer Research assumes no responsibility for the quality of the photograph as it appears in the Journal.

Electronic Submission of Illustrations. Authors may submit illustrations on disk. Contact the AACR Publications Department for a form to enclose with illustrations submitted on disk. Color electronic images should be provided in Encapsulated PostScript (EPS) format. Black and white illustrations should be provided in Tagged Image File Format (TIFF) and sized to approximate column width. In all cases, original artwork should also be submitted with the disk.

ABBREVIATIONS

Abbreviations are in general a hindrance to readers in fields other than that of the author(s), to abstractors, and to scientists in foreign countries. Authors should limit their use to an absolute minimum. Single words should not be abbreviated, e.g., daunomycin, folate, vincristine. Abbreviations are not to be used in titles, but running titles may carry abbreviations for purposes of brevity. Abstracts may contain abbreviations for terms mentioned 3 or more times in that section but their identification is mandatory.

Authors should follow the recommendations of the IUPAC-IUB Commission on Biochemical Nomenclature (see section below on Terminology). All nonstandard abbreviations should be identified in an inclusive abbreviation footnote to the first such abbreviation after the Abstract.

Abbreviations that form recognizable words, such as EAT and MOPS, are discouraged.

Standard Abbreviations. Authors may use, without definition, the abbreviations in the following lists.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAD*</td>
<td>nicotinamide adenine dinucleotide and its reduced form</td>
</tr>
<tr>
<td>NADP*</td>
<td>nicotinamide adenine dinucleotide phosphate and its reduced form</td>
</tr>
<tr>
<td>DPN*</td>
<td>diphosphopyridine nucleotide</td>
</tr>
<tr>
<td>AMP, GMP, IMP</td>
<td>adenosine monophosphate, guanosine monophosphate, inosine monophosphate</td>
</tr>
<tr>
<td>UMP, CMP, TMP</td>
<td>uridine monophosphate, cytidine monophosphate, thymidine monophosphate</td>
</tr>
<tr>
<td>ADP, ATP</td>
<td>adenosine diphosphate, adenosine triphosphate</td>
</tr>
<tr>
<td>AMP, dGMP, dIMP</td>
<td>adenosine monophosphate, deoxyguanosine monophosphate, deoxycytidine monophosphate</td>
</tr>
<tr>
<td>RNA, DNA</td>
<td>ribonucleic acid, deoxyribonucleic acid</td>
</tr>
<tr>
<td>RNase, DNase</td>
<td>ribonuclease, deoxyribonuclease</td>
</tr>
<tr>
<td>cDNA</td>
<td>complementary DNA</td>
</tr>
<tr>
<td>mRNA</td>
<td>messenger RNA</td>
</tr>
<tr>
<td>tRNA</td>
<td>transfer RNA (tRNA is not recommended for RNA preparations that accept amino acids.)</td>
</tr>
<tr>
<td>P₄, PP, Tris</td>
<td>orthophosphate, pyrophosphate, tris(hydroxymethyl)methylamine</td>
</tr>
<tr>
<td>EDTA</td>
<td>ethylenediaminetetraacetate</td>
</tr>
<tr>
<td>POPOP</td>
<td>1,4-bis(2-(5-phenyloxazoyl)benzene</td>
</tr>
<tr>
<td>PPO</td>
<td>2,5-diphenyloxazole</td>
</tr>
<tr>
<td>DEAE, TEAE</td>
<td>diethylaminoethyl, triethylaminoethyl</td>
</tr>
<tr>
<td>UV, IR</td>
<td>ultraviolet, infrared</td>
</tr>
<tr>
<td>RBC, WBC</td>
<td>red blood cell(s), white blood cell(s)</td>
</tr>
</tbody>
</table>

Units of Concentration

<table>
<thead>
<tr>
<th>Unit</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>molar (moles/liter)</td>
<td>M</td>
<td>(not used for moles)</td>
</tr>
<tr>
<td>millimolar (millimoles/liter)</td>
<td>mM</td>
<td>(preferred to 10⁻³ M)</td>
</tr>
<tr>
<td>micromolar</td>
<td>μM</td>
<td>(preferred to 10⁻⁶ M)</td>
</tr>
<tr>
<td>nanomolar</td>
<td>nM</td>
<td>(not μM)</td>
</tr>
<tr>
<td>picomolar</td>
<td>pM</td>
<td>(not μM)</td>
</tr>
</tbody>
</table>

The expression mg % should be avoided; weight concentrations should be given as g per ml, g per 100 ml, g per liter, etc.

Units of Length, Area, Volume, Mass, Time

<table>
<thead>
<tr>
<th>Unit</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>meter</td>
<td>m</td>
<td></td>
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**Terminology**

Approved terms and abbreviations for chemical substances have been collected in the *Compendium of Biochemical Nomenclature and Related Documents*, 2nd Edition, 1992. This volume is available from Portland Press Inc., Ashtead Publishing Co., Old Post Road, Brookfield, VT 05036; Phone: (802) 276-3162; Fax: (802) 276-3837. Included are all recommendations issued by the IUPAC-IUB Commission on Biochemical Nomenclature in the following areas: general abbreviations and symbols; abbreviations and symbols for chemical names of special interest in biological chemistry; stereochemistry; natural products and related compounds; isotopically labeled and modified compounds; biochemical equilibrium data; amino acids; symbols for amino acid derivatives and peptides; synthetic modifications of natural peptides; synthetic polypeptides or polymerized amino acids; aminocaproic acid; standardized symbols for aminocaproic acid derivatives and peptides; peptide hormones; human immunoglobulins, multiple forms of enzymes; nucleic acids; polynucleotides, and their constituents; lipids; steroids; quinones with isoprenoid side chains; carotenoids; tocopherols and related compounds; carbohydrates; cyclitols; phosphorus-containing compounds of importance in biochemistry; folic acids and related compounds; vitamins B₆ and related compounds; corrinoids.  

**Isotopically Labeled Compounds.** A radioactive nuclide is indicated by its mass number as a superscript to the left of the symbol (³²P); when written out, it should correspond to the spoken word (phosphorus-32).

In an isotopically labeled compound, the isotopic prefix should be placed in square brackets and immediately precede the name (word) to which it refers, as in [¹⁴C]thyminidine, [α-¹⁴C]leucine, L-[methyl-¹⁴C]methionine, [⁵¹ᵐO]H₂O-3-hydroxykynurenine. When more than one position in a substance is labeled by means of the same isotope and the positions are not indicated, the number of labeled atoms is added as a subscript to the right of the element, as in [¹⁴C]pyridoxic acid. The symbol U indicates uniform labeling and G, general labeling, e.g., [U-¹⁴C]glucose (where the ¹⁴C is uniformly distributed among all six positions) and [G-¹²C]glucose (where the ¹²C is distributed among all six positions, but not necessarily uniformly).

The isotopic prefix precedes that part of the name to which it refers, as in sodium [¹⁴C]formate, iodol[¹⁴C]acetic acid, 1-aminol[¹⁴C]methyl-cyclopentanol, α-aminoph[¹⁴C]olic acid, 2-acetamido-7-[¹³¹I]iodofluorocene, fructose 1,6-[¹³¹I]dibromophosphate, 17β-[³¹⁴C]estradiol. Terms such as "¹³¹I-labeled albumin" should not be contracted to "¹³¹Ialbumin" (since native albumin does not contain iodine), and "¹⁴C-labeled amino acids" should similarly not be written as "¹⁴Camino acids" (since there is no carbon in the amino group).

When isotopes of more than one element are introduced, their symbols should be arranged in alphabetical order, e.g., [³⁻¹⁴C]: 2,3-D; [¹¹⁷¹N]serine. Deuterium and tritium may be designated as [²H] and [³H] or as D and T, respectively.

When not sufficiently distinguished by the following means, the positions of isotopic labeling are indicated by Arabic numerals. Greek letters, or prefixes in italics, as appropriate; these are to be placed within square brackets to appear before the symbol of the element concerned and are attached to it by a hyphen. Examples of this style are [¹⁻¹⁴C]alanine, L-[²⁻¹⁴C]leucine or L-[α⁻¹⁴C]leucine, [carboxy-¹⁴C]leucine, [3,₁₆⁻¹⁴C]malic anhydride, [₃⁻¹⁴C, ₄⁻¹⁴C, ₅⁻¹⁴C]methionine, L-[methyl-¹⁴C]methionine. The symbol indicating configuration always precedes the bracketed isotope, and a hyphen is used to separate it from the bracketed, e.g., L-[(¹⁴C)-glucose; L-[¹⁴C]leucine.

The same rules apply when the labeled compound is designated by a symbol or a symbol other than the atomic symbol, e.g., [α-²⁻¹³P]ATP, [³₂⁻¹⁷P]CMP, or [¹²⁵I]-labeled. The square brackets are not to be used, however, with atomic symbols, or when the isotopic symbol is attached to a word that is not a specific chemical name, abbreviation, or symbol. Proper usage here is: [¹⁴C]Ο₂, [²⁻¹³P]ΟH, H_3O⁺, [³²⁻¹⁷P]P, [¹³¹]I-labeled, [³⁻¹⁴C]ligands, [¹⁻¹⁴C]steroids.

**Enzymes.** Authors should use the Recommended Name given in Enzyme Nomenclature 1992: Recommendations of the Nomenclature Committee of the International Union of Biochemistry on the Nomenclature and Classification of Enzymes (Academic Press, Inc., Orlando, FL, 1992). In some cases the Systematic Name or the reaction catalyzed should also be included. It is strongly recommended that the Enzyme Commission number be stated at first mention.

For information on isotope nomenclature, consult Biochemical Nomenclature and Related Documents, mentioned previously.

**Histones.** The six histone fractions are to be labeled H₁, H₁₄, H₂A, H₂B, H₃, and H₄, rather than F₁, F₂, F₂b, F₂b, F₃, and F₂a, respectively.

**Interferon Assays.** When reporting the calibration of interferon assays, authors should state the name, identifying number, and assigned potency of the international standard used to calibrate their assay, along with the observed geometric mean titer of the standard, the standard deviation of that value, the number of titrations performed to obtain that value, and the technical details of the assay.


**Outbred Animal Stocks.** Nomenclature for outbred laboratory animals should conform to that recommended by the Committee on Nomenclature, Institute of Laboratory Research: "A Nomenclature System for Outbred Animals," Lab. Animal Care, 20: 903-906, 1970.

**Drugs.** Generic names of drugs are preferred; a proprietary name may be used only after the first mention of the generic name and should be avoided in titles unless both names can be listed easily. If a foreign proprietary name is used, the name of the comparable U. S. product should be given. When there is no generic name for a drug, authors should give the chemical name or formula or a description of the active ingredients.
Authors should refer to the formally adopted generic names listed in USAN and the USP Dictionary of Drug Names (1997).

Tumors. Tumors used in experimental investigations should be clearly described and identified in acceptable terminology. If these tumors are well known and have been identified in previous publications, extended descriptions of the tumors are unnecessary.

Authors of clinical papers are encouraged to use the TNM staging system approved by the International Union Against Cancer and the American Joint Committee on Cancer, whenever applicable.

General. The composition of all solutions and buffers should be specified in sufficient detail so that the concentration of each component can be determined. The word “saline” should be replaced by “NaCl solution,” along with the exact concentration. Inert reagents such as “physiological saline” or “phosphate-buffered saline” are not permitted; exact contents and concentrations should be given.

Decimals are preferred to fractions; the form 0.01, not .01, is required in text, tables, and illustrations.

Ionic charge should be designated by a superscript immediately following the chemical symbol, e.g., Mg²⁺, S⁻.

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**FAX NO.:**

**E-Mail:**

☐ Check this box if you have a physical disability and have special requirements for transportation, hotel accommodations, or other facilities in connection with the meeting. A member of the Association Staff will contact you.

**WHAT IS YOUR PRIMARY FIELD OF RESEARCH? (Please check only one):**

- [ ] Biochemistry/Biophysics
- [ ] Carcinogenesis
- [ ] Cellular Biology and Genetics
- [ ] Clinical Investigations
- [ ] Endocrinology/Signal Transduction
- [ ] Epidemiology
- [ ] Experimental Therapeutics
- [ ] Immunology
- [ ] Molecular Biology and Genetics
- [ ] Prevention
- [ ] Radiobiology/Radiation Oncology
- [ ] Virology
- [ ] Other (please specify):

**ARE YOU THE PRESENTER OF AN ABSTRACT SUBMITTED FOR THE 1997 AACR MEETING?**

☐ Yes ☐ No

**ON WHICH DAYS WILL YOU ATTEND THE 1997 AACR ANNUAL MEETING?**

☐ Saturday, April 12 ☐ Sunday, April 13 ☐ Monday, April 14 ☐ Tuesday, April 15 ☐ Wednesday, April 16

☐ Check this box if you are a high school or undergraduate student. This information will be used for the organization of a special educational event during the annual meeting for students interested in pursuing careers in science. The program, to be organized by the AACR Science Education Committee, will include presentations as well as a panel discussion by cancer experts. Further information will be sent to you under separate cover.

## PAYMENT OF REGISTRATION

Fees may be paid by check or with a VISA, MasterCard, or American Express account. All payments must be made in U.S. currency, and all checks must be drawn on a U.S. bank. Payment must accompany this form; purchase orders will not be accepted as payment.

<table>
<thead>
<tr>
<th>On or Before February 14</th>
<th>After February 14</th>
<th>METHOD OF PAYMENT</th>
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<tbody>
<tr>
<td>☐ Active/Corresponding Member Rate $155</td>
<td>$195</td>
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<tr>
<td>☐ Nonmember Rate $305</td>
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<td>☐ Emeritus Member Rate $50</td>
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<td>☐ Honorary Member Rate $0</td>
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<td>☐ AACR Proceedings* $35 Members</td>
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<td>☐ Proceedings on CD-ROM $35 Members</td>
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<td>☐ TOTAL ENCLOSED OR CHARGED $</td>
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☐ Check payable to AACR, Inc. in U.S. currency, drawn on a U.S. bank

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<th>Person/Institution Issuing Check</th>
<th>Check No.</th>
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☐ VISA ☐ MasterCard ☐ American Express

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<th>Card Number</th>
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*An application for Associate Membership may accompany this form, but these should be submitted well before the February 14, 1997 deadline, as review of the Associate Membership application may delay registration. Students must enclose a statement, signed by the registrar, dean, or department head of their university or college on official letterhead, confirming their status. Postdoctoral fellows or physicians in training do not qualify for the student registration rate.

*AACR members with paid-up subscriptions to an AACR journal and registrants who pay the nonmember fee receive the Proceedings automatically. If these members or nonmembers check this box and pay the fee, they will receive an additional copy of the Proceedings.

*Optional payment for registrants outside of the U.S. and Canada only. Registrants paying this surcharge will receive meeting publications via airmail–printed matter before the annual meeting. This service will not be available after February 14, 1997.

AACR members in good standing will receive copies of the Program and Proceedings prior to the meeting. Nonmember and student registrants who meet the February 14 deadline will also receive the Program and (if they have purchased it) the Proceedings prior to the meeting. Nonmembers and students who do not meet the deadline must pick up publications at the meeting site.

## REFUND POLICY

Refunds on registration fees will be granted on written request received in the AACR Office by April 9, 1997. Requests received after this date will not be honored. Receipts and badges (if they have been mailed) must be returned to the AACR Office with the refund request. A cancellation fee of $35 will be deducted from all refunds to cover administrative costs.
BENEFITS OF MEMBERSHIP

The American Association for Cancer Research (AACR), a scientific society of over 11,500 laboratory and clinical cancer researchers, was founded in 1907 to facilitate communication and dissemination of knowledge among scientists and others dedicated to the cancer problem; to foster research in cancer and related biomedical sciences; to encourage the presentation and discussion of new and important observations in the field; to foster public education, science education, and training; and to advance the understanding of cancer etiology, prevention, diagnosis, and treatment throughout the world.

Members of the AACR enjoy the following benefits:

1. the privilege of sponsoring a proffered paper (abstract) for consideration for presentation at the AACR annual meeting;
2. an advance copy of the Program and Proceedings of the American Association for Cancer Research that contains over 4,000 abstracts of proffered papers presented at the annual meeting;
3. reduced registration rates at annual meetings;
4. priority notice of small, focussed meetings in the AACR’s exciting series of Special Conferences in Cancer Research;
5. substantially reduced registration rates for Special Conferences;
6. opportunities for participation in AACR meetings in North America and abroad with other scientific societies around the world;
7. receipt of AACR Newsletters and other important announcements;
8. early notification of and reduced rates for participation in the AACR Employment Register;
9. an up-to-date Membership Directory of over 11,500 member researchers in the cancer field;
10. the professional benefits of the AACR’s public education activities concerning funding for cancer research and press coverage of the latest research findings;
11. the opportunity to participate in three Summer Workshops that foster knowledge in the cancer field for young investigators;
12. the facilitation of informal scientific exchange with leading researchers in the cancer field; and
13. many more ongoing benefits.

QUALIFICATIONS FOR MEMBERSHIP

Active membership in the AACR is open to investigators who live in the Americas. Individuals who have conducted two years of research resulting in peer-reviewed publications relevant to cancer, or who have made substantial contributions to cancer research in an administrative or educational capacity, are eligible. If a candidate has conducted research in an area of biomedical science related to cancer, he or she will qualify for membership. Evidence of patents relevant to cancer research may be submitted as qualifications for membership in lieu of peer-reviewed publications.

Corresponding membership is open to persons who are not residents of the Americas. The qualifications for corresponding membership are the same as those indicated above for active membership. Visiting scientists from outside the Americas who intend to return to their countries of origin by the anticipated time of election should apply for corresponding membership. All other visiting scientists should apply for active membership and transfer to corresponding status upon leaving the Americas.

Graduate and medical students, postdoctoral fellows, and physicians in training who do not yet meet the above qualifications for active or corresponding membership should apply for associate membership. Forms for associate membership are available from the AACR Office.

PROCEDURES FOR APPLICATION

There are three deadlines for the receipt of a membership application: January 1, May 1, and September 1 of each year. The Membership Committee will review all complete applications for active membership that have been received by these deadlines and will submit recommendations on each candidate to the Board of Directors which formally elects all members. The same procedure is followed by the Special Memberships Committee which receives applications for corresponding membership. Candidates will be notified according to the following schedule:

<table>
<thead>
<tr>
<th>Receipt of Application</th>
<th>Notification of Candidate</th>
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<td>in AACR Office</td>
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<tr>
<td>January 1</td>
<td>March</td>
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<td>May 1</td>
<td>July</td>
</tr>
<tr>
<td>September 1</td>
<td>November</td>
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A complete application consists of the following material:
1. 6 copies of the form on the opposite side of this page, with all requested information provided.
2. 5 copies of the candidate’s most current curriculum vitae and bibliography.
3. 5 copies of a letter of recommendation from a nominator who is an active, corresponding, emeritus, or honorary member of the AACR (at least one copy must be a signed, original letter). This letter should describe the candidate’s achievements in laboratory research, clinical investigations, or epidemiological research, and it should affirm that this research adheres to accepted ethical scientific standards. –OR– The nominator may supply the responses requested at the bottom of the application form in the section entitled “STATEMENT OF SUPPORT” (at least one copy of the form must be the signed original).
4. 5 copies of a letter of recommendation as described in Item 3 above from a seconder who is an active, corresponding, emeritus, or honorary member of the AACR (at least one copy must be a signed, original letter). –OR– The seconder may supply the responses requested at the bottom of the application form in the section entitled “STATEMENT OF SUPPORT” (at least one copy of the form must be the signed original).
5. 5 reprints of each of two publications on which the candidate appears as author. As noted above, evidence of patents developed by the candidate may be submitted in lieu of one or both of the publications. If submitting patents, supply patent number and year awarded.

All material should be collated into five complete sets with the original application form as a covering document and sent to the address given below. Questions regarding procedures for membership application may also be directed to the following address:

American Association for Cancer Research
Public Ledger Building, Suite 816
150 S. Independence Mall West
Philadelphia, PA 19106-3483
Phone: 215/440-9300
FAX: 215/440-9313
E-mail: aacr@aacr.org

RESPONSIBILITIES OF MEMBERSHIP

Candidates should be aware of the following responsibilities of membership in the AACR. Active members must pay annual dues. In 1997 annual dues for active members are $175, $100 of which is designated for AACR journal subscriptions. Newly elected members of the AACR who have already purchased subscriptions to Cancer Research, Clinical Cancer Research, Cell Growth & Differentiation, or Cancer Epidemiology, Biomarkers & Prevention at the higher, nonmember rates will receive reimbursement of the unused portion of those subscriptions once their first year’s membership dues are paid in full.

Corresponding members are required to pay dues ($90 in 1997) and may, if they wish, subscribe to Cancer Research, Clinical Cancer Research, Cell Growth & Differentiation, or Cancer Epidemiology, Biomarkers & Prevention at reduced member rates.

Applicants elected in March will be responsible for payment of that year’s dues; applicants elected in July and November will pay dues for the following year. Applicants elected in March and July will be eligible to sponsor an abstract for the next annual meeting. Every effort will be made to afford the same opportunity to applicants elected in November.

Margaret Foti, Ph.D.
Executive Director
APPLICATION FOR ACTIVE OR CORRESPONDING MEMBERSHIP

NAME OF CANDIDATE: ____________________________________________ DATE OF BIRTH: _____________

LAST FIRST M.I.

PRESENT POSITION/TITLE: _______________________________________

INSTITUTIONAL AFFILIATION: _____________________________________

INSTITUTIONAL ADDRESS:

(City) (State/Province) (Country) (Postal Code)

TELEPHONE NUMBER: _______________________________ FAX NUMBER: _______________________________

E-MAIL NUMBER (CARRIER): __________________________________

PRIMARY FIELD OF RESEARCH (Please check only one):

- Biochemistry and Biophysics
- Biostatistics
- Carcinogenesis
- Cellular Biology and Genetics
- Clinical Investigations
- Endocrinology
- Epidemiology
- Immunology
- Molecular Biology and Genetics
- Preclinical Pharmacology and Experimental Therapeutics
- Virology
- Other: ____________________________________________ (Please specify)

ACADEMIC DEGREES (Including where and when granted)

______________________________________________________________

______________________________________________________________

EXPERIENCE SINCE HIGHEST DEGREE WAS GRANTED (Please list most recent first)

______________________________________________________________

______________________________________________________________

______________________________________________________________

PUBLICATIONS (Reprints of two peer-reviewed articles on which the candidate appears as an author must accompany this application. For these two articles list the authors, title, journal, volume, inclusive pages, and year. Do not submit abstracts. If submitting patents, supply patent number and year awarded.)

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

CANDIDATE IS APPLYING FOR (Check one): □ ACTIVE □ CORRESPONDING MEMBERSHIP

CANDIDATE NOMINATED BY*: ____________________________________________ (Please print)

CANDIDATE SECONDED BY*: ____________________________________________ (Please print)

STATEMENT OF SUPPORT

Instead of submitting letters of recommendation, either the nominator or the seconder or both may complete the following section:

I acknowledge by signing this statement of support that this candidate adheres to accepted ethical scientific standards and has or will make a long-term contribution to cancer research.

_________________________________________ Signature of Nominator* ___________ Date ___________ Signature of Seconder* ___________ Date

See Guidelines for Application on the reverse side of this form for further instructions.

*Both nominator and seconder must be active, corresponding, emeritus, or honorary members of the AACR.

(This form may be reproduced.) 1997
AMERICAN ASSOCIATION FOR CANCER RESEARCH

GUIDELINES FOR APPLICATION FOR ASSOCIATE MEMBERSHIP

QUALIFICATIONS FOR MEMBERSHIP

Associate membership is open to graduate students, medical students, postdoctoral fellows, and physicians in training who are following a course of study or who are working in a research program relevant to cancer. Scientists in training who already have a substantial record of publications may wish to apply for active or corresponding membership which confers full benefits of membership.

BENEFITS OF MEMBERSHIP

The American Association for Cancer Research (AACR), a scientific society consisting of laboratory and clinical cancer researchers, was founded in 1907 to facilitate communication and dissemination of knowledge among scientists and others dedicated to the cancer problem; to foster research in cancer and related biomedical sciences; to encourage presentation and discussion of new and important observations in the field; to foster public education, science education, and training; and to advance the understanding of cancer etiology, prevention, diagnosis, and treatment throughout the world. Associate members of the AACR enjoy the following benefits:

1. the privilege of sponsoring a proffered paper (abstract) for consideration for presentation at the AACR annual meeting provided that (a) the associate member is the presenter of the paper and (b) an active, corresponding, emeritus, or honorary member in good standing of the AACR also signs the abstract of the paper in support of the work. (In this instance, the member who signs the abstract does not lose his or her own sponsorship privilege);
2. an advance copy of the Scientific Program and (if one has been purchased by the associate member) the Proceedings of the American Association for Cancer Research that contains over 4,000 abstracts of proffered papers presented at the annual meeting;
3. the privilege of registering for the annual meeting at the low associate member rate;
4. preferred access to the AACR Employment Register;
5. optional subscriptions to the Association's high-quality journals Cancer Research, Clinical Cancer Research, Cell Growth & Differentiation, and Cancer Epidemiology, Biomarkers & Prevention at reduced member rates;
6. priority notification of events in the AACR’s series of special conferences on timely subjects in the field;
7. substantially reduced registration rates at special conferences;
8. the receipt of AACR newsletters, meeting announcements, and an up-to-date Membership Directory;
9. the opportunity to participate in three Summer Workshops that foster knowledge in the cancer field for young investigators; and
10. the facilitation of informal scientific exchange with leading researchers in the cancer field.

PROCEDURES FOR APPLICATION

Persons wishing to apply for associate membership must use the official application form on the reverse side of these instructions. Each candidate for associate membership must be nominated by an active, corresponding, emeritus, or honorary member in good standing of the AACR. Three completed copies of the form should be submitted; at least one of these copies must carry the original signatures of both the candidate and the nominator. In addition, the candidate should submit one copy of his or her curriculum vitae. The application form may be submitted to the Association Office at any time.

After review of applications for associate membership, the Executive Director will notify candidates of their election or deferral within one month of the receipt of the application form. A check for one year’s dues payment must accompany the application. Dues for 1996 are $35 for associate members residing in the Americas and $45 for residents of other countries. For 1997 these rates are $45 and $55, respectively. This fee will be refunded to any candidate deemed to be ineligible for associate membership. Checks should be in U.S. currency, made payable to AACR, Inc., and drawn on a U.S. bank. Send the three copies of the application form and the appropriate dues payment to:

American Association for Cancer Research
Public Ledger Building, Suite 816
150 S. Independence Mall West
Philadelphia, PA 19106-3483
Phone: 215/440-9300
FAX: 215/440-9313
E-mail: aacr@aacr.org

RESPONSIBILITIES OF MEMBERSHIP

Associate members must pay annual dues in an amount to be determined by the AACR Board of Directors. Dues for 1996 have been set at $35 per year for residents of the Americas and $45 for residents of other countries. For 1997 these rates are $45 and $55, respectively. If an application is submitted by August 31, the accompanying dues payment will be credited to the current year. Candidates submitting applications between September 1 and December 31 may indicate whether they wish their dues payments credited to the current or forthcoming year. Candidates should be aware, however, that associate members may sponsor an abstract for the annual meeting only if their dues for the current year are paid. For example, an associate member submitting an abstract in November 1996 for the forthcoming annual meeting must have paid dues for 1996. Any newly elected associate members of the AACR who have already purchased subscriptions to Cancer Research, Clinical Cancer Research, Cell Growth & Differentiation, or Cancer Epidemiology, Biomarkers & Prevention at the higher, nonmember rate will receive a refund for the unused portion of that subscription upon receipt of their payment for a member’s subscription.

Each Fall the AACR will send to current associate members an invoice for dues for the forthcoming year. Payment of this invoice must be accompanied by a statement signed by the associate member’s current registrar, dean, or department head, verifying the member’s current academic status. The Association’s By-Laws state that dues are payable for each year in advance by January 1 of the year to which they should be applied. An individual may be an associate member for a maximum of five years. Each year in which an individual pays dues will count as one full year of associate membership. Thus, an associate member who pays dues for 1996 may retain associate membership until December 31, 2000. The Board of Directors may terminate the membership of an associate member whose dues are in arrears for two years.

Margaret Foti, Ph.D.
Executive Director
APPLICATION FOR ASSOCIATE MEMBERSHIP

NAME OF CANDIDATE: ___________________________ DATE OF BIRTH: ____________

LAST FIRST M.I.

INSTITUTIONAL AFFILIATION: ___________________________________________________________

INSTITUTIONAL ADDRESS: ___________________________________________________________

(City) (State/Province) (Country) (Postal Code)

TELEPHONE NUMBER: ___________________________ FAX NUMBER: ___________________________

PRESENT ACADEMIC STATUS/TITLE (Please check only): E-MAIL NUMBER (CARRIER): __________

_____ Graduate Student _____ Medical Student

_____ Physician in Training _____ Postdoctoral Fellow

PRIMARY FIELD OF RESEARCH (Please check only one):

_____ Biochemistry and Biophysics _____ Biostatistics _____ Carcinogenesis

_____ Cellular Biology and Genetics _____ Clinical Investigations _____ Endocrinology

_____ Epidemiology _____ Immunology _____ Molecular Biology and Genetics

_____ Preclinical Pharmacology and Experimental Therapeutics _____ Virology _____ Other: ______________________________

ACADEMIC DEGREES (Please indicate degree(s) acquired to date along with the name of the academic institution and date of receipt. Provide information on degree currently being sought and the anticipated date of completion of this degree program.)

_________________________________________________________________________________

_________________________________________________________________________________

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RELEVANT RESEARCH EXPERIENCE NOT RELATED TO COURSE WORK (Please list most recent first.)

_________________________________________________________________________________

_________________________________________________________________________________

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_________________________________________________________________________________

PUBLICATIONS (List the authors, title, journal, volume, inclusive pages, and year of any article in a peer-reviewed journal on which the candidate appears as an author. Do not list abstracts. Continue on a separate sheet, if necessary.)

_________________________________________________________________________________

_________________________________________________________________________________

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CANDIDATE NOMINATED BY*: __________________________________________________________

(Please print)

SIGNATURES

I hereby apply for associate membership in the American Association for Cancer Research. I have read the instructions on the reverse side of this form, and I understand the privileges and responsibilities of this class of membership. I certify that the statements on this application are true.

Signature of Candidate: ___________________________ Date: ______________________

I recommend this candidate for associate membership in the American Association for Cancer Research. To the best of my knowledge, the candidate is qualified for this class of membership, and the statements on this application are true.

Signature of Nominator*: ___________________________ Date: ______________________

Submit three copies of this form. At least one copy must contain the original signatures of the candidate and the nominator. In addition, submit one copy of your curriculum vitae. Enclose a check in U.S. funds, made payable to AACC, Inc., and drawn on a U.S. bank for one year’s dues. For 1996, dues are $35 for associate members residing in the Americas and $45 for residents of other countries. For 1997, these rates will be $45 and $55, respectively.

Check one of the following boxes only if this form is being submitted between September 1 and December 31:
The enclosed dues payment should be applied to the □ current □ forthcoming calendar year.

(NOTE: If dues are applied to the forthcoming year, membership will take effect on January 1, but the candidate will not be eligible to sponsor an abstract for presentation at the annual meeting in March on April of that year.) See Guidelines for Application on the reverse side of this form for further instructions.

*Nominator must be active, corresponding, emeritus, or honorary member of the AACC.

(This form may be reproduced.)

1997
Guidelines for Submitting Disks to American Association for Cancer Research Publications

The word processing packages that we prefer are as follows:

- MacWrite
- Microsoft Word (DOS, Windows, and Macintosh)
- WordPerfect (DOS, Windows, and Macintosh)
- XyWrite (DOS and Windows)

Also acceptable:

- Ability
- AmiPro
- A_\text{\LaTeX}
- Appleworks
- ArborTeX
- ArborText
- ClarisWorks WP
- CPT 8000
- CTOS
- Diablo
- DisplayWrite
- Duet
- Einstein
- Enable
- EXP
- Final Word
- FullWrite
- GemWord Plus
- IBM Writing Assistant
- Interleaf
- \LaTeX
- Latex
- Leading Edge
- Lotus Manuscript
- Lotus Write
- Mass 11
- MS Windows Write
- MS Works
- MS Works WP Mac
- Multimate
- Multimate Advantage
- Nibia
- Nisus (to ASCII file)
- Notewriter
- Obun
- OfficeWriter
- PC Write
- PFS First Choice
- Professional Write
- Q&A Write
- Quark XPress
- RagTime MS Works
- (to ASCII file)
- Rich Text Format
- RSG (to ASCII file)
- Signature
- SLiTEx
- SmartWhere
- SmartWrite II
- SunWrite
- Symphony
- Text EXecutive
- Textures
- Total Word
- Troff
- \mu\TeX
- Volkswriter
- VuWriter
- Wang OIS
- Wang WPS
- Wang Writer
- Window Works
- Windows Write
- WizWord
- Wordstar
- Wordstar 2000
- WriteNow
- Xerox

Software packages that we are unable to translate:

- FrameMaker
- PageMaker
- Ready, Set, Go
- Scientific Writer

Disks produced on IBM or IBM-compatible computers are preferred, but those produced on some Apple or Wang computers can also be converted. Because of the file structures and internal coding, we cannot accept disks created on desktop publishing systems or those created on proprietary typesetting systems. We also cannot guarantee that all special characters can be translated. Tabular and mathematical material, such as equations, will not be captured from the disk but will be rekeyed.

To expedite work and for your own security, we do require that you submit a hard copy printout of the disk file. The tables and equations will be keyed from this hard copy. We also need to know the name of the file to be converted, the type of hardware (e.g., IBM PC) on which the files were created, the operating system (e.g., DOS 3.3), and the version of the software (e.g., WordPerfect 5.1) used to create the file.

PLEASE FILL OUT ALL INFORMATION ON REVERSE SIDE AND SUBMIT THIS FORM WITH YOUR DISK. DISKS WILL NOT BE PROCESSED WITHOUT THIS INFORMATION.
DISK SUBMISSION FORM

AACR journals are now using personal computers to copyedit manuscripts accepted for publication. When submitting a revised manuscript, authors are encouraged to submit an electronic disk of the paper along with the required four hard copy printouts. Disks will ultimately be returned to the authors.

See reverse for the word processing packages that can be accepted.

File preparation

Please be sure that the file you send is the most recent version of the manuscript and that it matches the most recently submitted printed copy. The file should contain all the parts of the manuscript in one file. Mathematical and tabular material, however, will be processed in the traditional manner and may be excluded from the disk file.

Note: AACR does not assume responsibility for errors in conversion of customized software, newly released software, or special characters.

Please label the outside of the disk with the journal name, the first author's name, a partial title of the manuscript, and the name of the computer file used to access the manuscript on disk. To process your disk efficiently, we need the following information. Please be sure to provide ALL the information.

Name used to access paper on disk: ________________________________
Name of computer used (e.g., IBM/PS2): ____________________________
Operating system and version (e.g., DOS 3.3): _______________________
Word processing program and version (e.g., WordPerfect 5.0): __________
[See reverse for acceptable programs.]

Manuscript number: ______________________________________________
First author: _____________________________________________________
Corresponding author (if different from first author): _________________
Telephone/FAX numbers: __________________________________________

This form (both sides) may be reproduced.
MARCH 7-12, 1997
Basic and Clinical Aspects of Breast Cancer
Chairpersons: J. Carl Barrett, Research Triangle Park, NC; Karen S.H. Antman, New York, NY; Mary-Claire King, Seattle, WA
Keystone Resort, Keystone, CO

APRIL 12-16, 1997
88th Annual Meeting
Chairperson: Frederick P. Li, Boston, MA
Co-Chairpersons: Clara Derber Bloomfield, Buffalo, NY; Stephen H. Friend, Seattle, WA
San Diego Convention Center, San Diego, CA

JUNE 7-11, 1997
Cancer of the Central Nervous System
Conference with Neurosurgery Joint Section on Tumors
Chairpersons: Peter McL. Black, Boston, MA; Webster K. Cavenee, La Jolla, CA
Loew's Coronado Bay Resort, San Diego, CA

SEPTEMBER 9-13, 1997
Molecular Genetics of Cancer
Conference with the European Association for Cancer Research
Chairpersons: Eric J. Stanbridge, Irvine, CA; Walter Bodmer, Oxford, England
Hertford College, Oxford, England

SEPTEMBER 26-30, 1997
Tumor Suppressor Genes
Chairpersons: Stephen H. Friend, Seattle, WA; Philip Branton, Montreal, Quebec, Canada
Victoria Conference Centre, Victoria, BC, Canada

OCTOBER 17-21, 1997
Gene Regulation in Differentiation and Development
Chairpersons: Robert Eisenman, Seattle, WA; Elaine V. Fuchs, Chicago, IL
The Sagamore Resort, Bolton Landing (Lake George), NY

DECEMBER 1997
Epigenetics of Cancer
Chairperson: Peter A. Jones, Los Angeles, CA
Location in Puerto Rico to be Announced

JANUARY 9-13, 1998
Colorectal Cancer — Biology, Treatment, and Prevention
Joint Meeting with the American Society of Clinical Oncology
Chairpersons: Robert J. Mayer, Boston, MA; One Additional Chairperson to be Announced
Renaissance Esmeralda Resort, Indian Wells (Palm Springs), CA

JANUARY 1998
Angiogenesis and Cancer
Chairpersons: Judah Folkman, Boston, MA; Michael Klagsbrun, Boston, MA
Location in Orlando, FL to be Announced

FEBRUARY 16-21, 1998
Innovative Molecular Biology Approaches to the Prevention, Diagnosis, and Therapy of Cancer
Joint Meeting with the Japanese Cancer Association
Chairpersons: Edward Bresnick, Worcester, MA; Kaoru Abe, Tokyo, Japan
Maui Marriott Resort, Maui, HI

AACR members will receive brochures on the above conferences as soon as they are available.
Nonmembers should call or write:
American Association for Cancer Research
Public Ledger Building, Suite 816
150 South Independence Mall West
Philadelphia, PA 19106-3483
215-440-9300 • 215-440-9313 (FAX)
E-Mail: aacr@aacr.org

For regular updates to this list visit the AACR's Website, http://www.aacr.org
PLENARY SESSION
Genetic Predisposition to Cancer (Louise C. Strong)

SYMPOSIA
Genes, Cell Proliferation, and Antineoplastic Drugs (George F. Vande Woude)
Diagnostic, Prognostic, and Therapeutic Aspects of Tumor Suppressor Genes (David Sidransky)
Cell Cycle Regulation (Peggy J. Farnham)
Breast Cancer Genes (Barbara L. Weber)
Metastasis, Invasion, and Angiogenesis: Mechanisms and Therapeutic Strategies (Marilyn M. Cornwell and Elise C. Kohn)
Novel Clinical Trials Based on Genetics and Molecular Therapeutics (Stephen H. Friend)
Apoptosis and Cancer Therapy (Michael B. Kastan)
Identification and Management of Genetic-High-Risk Individuals (Albert de la Chapelle)
Demystifying the Role of Cytokines in Tumor Immunobiology: Status and Future Utility (Michael A. Caligiuri)
Telomerase and Clinical Applications (Titia de Lange)
Acute Myelocytic Leukemia (Clara Derber Bloomfield)
Prostate Cancer (Donald S. Coffey)
Colon Cancer (Margaret A. Tempero)
Signaling Pathways for Novel Therapeutics (Anthony J. Pawson)
Animal Models for Functional Analysis of Tumor Suppressor Genes (Terry A. Van Dyke)
New Techniques for Molecular Diagnostics (Eric S. Lander)
Mechanisms of Cellular Senescence (J. Carl Barrett)
Damage Response Pathways (Philip C. Hanawalt)
Gene Interactions with the Environment/Carcinogenesis (Allan Balmain)
Epidemiology and Pathogenesis of Secondary Cancers (Frederick P. Li)

CONTROVERSY SESSIONS
What Are the Appropriate Therapeutic Uses of Hematopoietic Growth Factors? (Peter J. Quesenberry)
Estrogen Replacement Therapy: Beneficial or Harmful? (Larry Norton)
What is the Value of Mammography in Young and Genetically Susceptible Women? (Edward Bresnick)
Is the Time Right for Cancer Chemoprevention? (Edward Bresnick)
Gene Patents: Help or Hindrance to Conquering Cancer? (Samuel A. Wells, Jr.)
What is the Role of Prophylactic Surgery in Breast and Ovarian Cancer? (Samuel A. Wells, Jr.)
What Are the Appropriate Guidelines for the Use of Archived Human Tissue?
How Robust Are Antisense/Third Strand Techniques for Gene Disruption?

“MEET-THE-EXPERT” SUNRISE SESSIONS
Angiogenesis
Gene Therapy (Jack A. Roth)
Strategies for Drug Development (Daniel D. Von Hoff)
Advances in Our Molecular Understanding of Lymphoproliferative Disease (A. Thomas Look)
FHIT Gene Alterations in Cancer (Kay Huebner)
Cancer Vaccines (David P. Carbone)
Lung Cancer
Costimulatory Molecules in Tumor Immunity
New Approaches to Overcoming Multidrug Resistance (Alan F. List)
Advances in Oncologic Imaging (Michael J. Welch)
Retinoids and Cancer Chemoprevention (Wan Ki Hong)
Mechanisms of Regulation of p53 Function (Guillermina Lozano)
p53 and Genetic Instability (Geoffrey Wahl)
Farnesyl Transferase Inhibitors (Allen I. Oliff)
Human Cancer Genetics Travels to Cyberspace (Kenneth H. Buetow)
DNA Methylation in Cancer (Stephen B. Baylin)
Chemoprevention in Transgenic Animals (James M. Phang)
Advances in Stem Cell Transplantation
Psychosocial Issues in Cancer
Advances in the Management of AIDS-related Malignancies (Ellen G. Feigal)
Recent Developments in Our Understanding of Minimal Residual Disease (John G. Gribben)
Ovarian Cancer Update (Robert C. Bast, Jr.)
The Biological Basis of the New International Classification of Lymphoma (Elaine S. Jaffe)
Recent Developments in Radiotherapy (Ralph R. Weichselbaum)
Colon Cancer Genes (Stanley R. Hamilton)
Extracellular Connections (Mina J. Bissell)
Barrett’s Esophageal Cancer and Tumor Progression Models (Brian J. Reid)
H. Pylori and Gastric Carcinogenesis (Pelayo Correa)
Transcriptional Models and Drug Discovery (William G. Kaelin)

METHODS WORKSHOPS AND EDUCATIONAL SESSIONS
To be announced

Further Information: AACR Office · Public Ledger Building · Suite 816 · 150 S. Independence Mall West · Philadelphia, PA 19106-3483 · TELEPHONE: (215) 440-9300 · FAX: (215) 440-9313 · Email: aacr@aacr.org · For up-to-date information visit the AACR Website at http://www.aacr.org