

Institution: OHIO STATE UNIVERSITY LIB. Sign In as Member / Individual

#### Information for Authors

Revised March 2006
PDF of Information for Authors

**■ PURPOSE AND SCOPE** 

## EDITORIAL POLICIES

- Submission and Review
- Journal Policies

## **▼ PROCEDURES FOR SUBMITTING MANUSCRIPTS**

- Publication Charges
- Manuscript Preparation
- Language-Editing Services
- Submitting Manuscripts Online
- Digital Figures
- Tables

# Forms and Details for Submission

Select

- Supporting Information
- Use of URLs in Text
- Journal Cover Figures
- Submitting Print Manuscripts
- Manuscript Length
- Manuscript Format

## PURPOSE AND SCOPE

The *Proceedings of the National Academy of Sciences USA* (PNAS) publishes research reports, commentaries, perspectives, and colloquium papers. In accordance with the guiding principles established by George Ellery Hale in 1914, PNAS publishes brief first announcements of Academy members' and foreign associates' (hereafter referred to as members) more important contributions to research and of work that appears to a member to be of particular importance. PNAS is a general science journal with a broad scientific audience. All papers should be intelligible to this audience.

**Research Reports** describe the results of original research of exceptional importance.

<u>Commentaries</u> call attention to papers of particular note and are written at the invitation of the Editorial Board.

<u>Perspectives</u> present a viewpoint on an important area of research and are written at the invitation of the Editorial Board.

**Colloquium Papers** are reports of scientific colloquia held under Academy auspices.

# EDITORIAL POLICIES

Submission and Review | Journal Policies

#### Submission and Review

Manuscripts may be submitted to PNAS through any of the following three tracks:

Track I. An Academy member may "communicate" manuscripts for others that are within the

member's area of expertise. Prior to submission to PNAS, the member obtains outside reviews of the paper from at least two qualified referees, each from a different institution and not from the authors' institutions. The names and contact information, including e-mails, of referees who reviewed the paper, along with the reviews and the authors' response must be included. Reviews must be submitted on the PNAS review form. The communicating member should include a brief statement endorsing publication in PNAS.

**Track II.** Authors (members and nonmembers) may submit their manuscripts directly to the PNAS office. In a cover letter or in the online submission form, authors must recommend up to 3 appropriate Editorial Board members, 3 NAS members who are expert in the paper's scientific area, and 5 qualified referees. The Editorial Board may choose an editor for the paper who is not on that list or may reject the paper without further review. The editor conducts the review of the paper as described for Track I. A link to the directory of Academy members and their research interests is on the NAS website at <a href="www.nasonline.org">www.nasonline.org</a> (click on the link labeled "Members"). The name of the editor, who may remain anonymous to the author until the paper is accepted, will be published in PNAS as editor of the article.

**Track III.** An Academy member may submit his or her own manuscripts for publication. Members' submissions must be accompanied by the name(s) and contact information, including e-mail(s), of knowledgeable colleague(s) who reviewed the paper, along with the reviews(s), the authors' response, and a brief statement endorsing publication in PNAS. The review(s) must be on the PNAS review form. The Academy member must be a corresponding author on the paper.

**All Tracks.** Manuscripts submitted under any of the three tracks are evaluated by the Editorial Board. The Board may reject manuscripts without further review or may subject manuscripts to review and reject those that do not meet the standards of the journal. Manuscripts rejected by one member cannot be resubmitted through another member. When revisions are requested prior to final decision, revised papers must be received within three months or they will be treated as new submissions.

In the journal, Track I, II, and III papers are distinguished respectively as "Communicated by," "Edited by," and "Contributed by" the responsible editor. Track II papers have an additional identifying footnote.

#### Journal Policies

(i) Articles are accepted provided they have not been **Published Previously** or concurrently submitted for publication elsewhere. Related manuscripts that are in press or submitted elsewhere must be included with your PNAS submission.

Figures or tables that have been published elsewhere must be identified, and permission of the copyright holder for *both* the print and the online editions of the journal must be provided (see sample permission request letter at <a href="www.pnas.org/misc/permissions">www.pnas.org/misc/permissions</a> letter.rtf).

(ii) **Authorship** should be limited to those who have contributed substantially to the work. The corresponding author must have obtained permission from all authors for the submission of each version of the paper and for any change in authorship.

All collaborators share some degree of responsibility for any paper they coauthor. Some coauthors have responsibility for the entire paper as an accurate, verifiable report of the research. These include coauthors who are accountable for the integrity of the data reported in the paper, carry out the analysis, write the manuscript, present major findings at conferences, or provide scientific leadership to junior colleagues. Coauthors who make specific, limited contributions to a paper are responsible for their contributions but may have only limited responsibility for other results. While not all coauthors may be familiar with all aspects of the research presented in their paper, all collaborators should have in place an appropriate process for reviewing the accuracy of the reported results.

Authors must indicate their specific contributions to the published work. This information will be posted online as a footnote to the paper. Examples of designations include:

- Designed research
- Performed research
- Contributed new reagents or analytic tools
- Analyzed data
- Wrote the paper

An author may list more than one contribution, and more than one author may have contributed to the same aspect of the work.

- (iii) All authors, members, referees, and editors must disclose any association that poses a **Conflict of Interest** in connection with the manuscript. Authors must acknowledge all funding sources supporting the work. Please see www.pnas.org/misc/coi.shtml for details.
- (iv) A completed form assigning Copyright to the National Academy of Sciences must be returned to the PNAS office before the paper can be published. This and other forms are available at <a href="https://www.pnas.org">www.pnas.org</a>.
- (v) The Academy may distribute **Embargoed** copies of an accepted article to the press prior to publication. Embargoes expire at 5:00 PM Eastern time, the Monday before publication. Authors may talk freely with the press about their work but should coordinate with the PNAS News Office so that reporters are aware of PNAS policy. If you plan on presenting your embargoed paper at a conference prior to publication, please contact the PNAS News Office immediately at 202-334-1310 or PNASnews@nas.edu.
- (vi) Research involving **Human and Animal Subjects** must have been approved by the author's institutional review board. All clinical investigation must have been conducted according to the principles expressed in the <u>Declaration of Helsinki</u>.
- (vii) For research using **Recombinant DNA**, physical and biological containment must conform to <u>National Institutes of Health</u> guidelines or those of a corresponding agency.
- (viii) Materials and Data Availability. To allow others to replicate and build on work published in PNAS, authors must make materials, data, and associated protocols available to readers. Authors must disclose upon submission of the manuscript any restrictions on the availability of materials or information.

Authors must make **Unique Materials** (e.g., cloned DNAs; antibodies; bacterial, animal, or plant cells; viruses; and computer programs) promptly available on request by qualified researchers for their own use. Failure to comply will preclude future publication in the journal. It is reasonable for authors to charge a modest amount to cover the cost of preparing and shipping the requested material. Contact <a href="mailto:pnas@nas.edu">pnas@nas.edu</a> if you have difficulty obtaining materials.

**Databases:** Before publication, authors must deposit large data sets (including microarray data, protein or nucleic acid sequences, and atomic coordinates for macromolecular structures) in an approved database and provide an accession number for inclusion in the published paper. When no public repository exists, authors must provide the data as Supporting Information online or, in special

circumstances when this is not possible, on the author's web site, provided that a copy of the data is provided to PNAS.

**Protein and Nucleic Acid Sequences:** Authors must deposit data in a publicly available database such <u>GenBank/EMBL/DNA Data Bank of Japan, Brookhaven, Swiss-Prot.</u>

Structural Studies: Authors of papers describing new structure determinations must submit to the Protein Data Bank at the Research Collaboratory for Structural Bioinformatics (<a href="www.rcsb.org">www.rcsb.org</a>) or its equivalent, all structural data required to validate the discussion, including x-ray amplitudes, structure factor files, and the derived atomic coordinates. For nuclear magnetic resonance structures, data deposited should include resonance assignments and all restraints used in structure determination and the derived atomic coordinates for both an individual structure and a family of acceptable structures. Articles must include literature references for all coordinate data sets as well as data set identification. Authors must agree to release the coordinates when the article is published.

*Microarray Data:* Authors should present data in MIAME-compliant standard format and deposit data in the GEO or ArrayExpress databases.

Functional Magnetic Resonance Imaging (fMRI) Studies: Authors should deposit data directly with the fMRI Data Center at www.fmridc.org.

- (ix) Figure Preparation: No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. The grouping or consolidation of images from multiple sources must be made explicit by the arrangement of the figure and in the text of the figure legend. Adjustments of brightness, contrast, or color balance are acceptable if they are applied to the whole image and as long as they do not obscure, eliminate, or misrepresent any information present in the original, including backgrounds. Questions about images raised during review will be referred to the Editors, who may request the original data from the authors for comparison to the prepared figures. If the original data cannot be produced, the manuscript may be rejected. Cases of deliberate misrepresentation of data will result in rejection of the paper and will be reported to the corresponding author's home institution or funding agency.
- (x) **Supporting Information:** Supporting Information enhances papers in PNAS by providing additional substantive material, but the print version of the paper must stand on its own merits. Supporting Information is reviewed along with the paper but instead of appearing in the printed version of the journal, is posted on the <u>PNAS web site</u> at the time of publication. Supporting Information is referred to in the text and cannot be altered by authors after acceptance.

Supporting Information may take the form of supplemental figures, tables, datasets, derivations, and videos. Authors should express their interest in their cover letter to include Supporting Information with their paper. In addition, editors may suggest that part of the submitted data could be more suitably presented online only to save journal space and to focus the article.

(xi) **PNAS Early Edition:** PNAS articles are published daily online before print at www.pnas.org in <u>PNAS Early Edition</u>. Papers may be published online 1 to 4 weeks before they appear in print. Authors who return proofs quickly and keep changes to a minimum get maximum publication speed. A paper in Early Edition is the publication of record. The official publication date is posted with the article online.

## ■ PROCEDURES FOR SUBMITTING MANUSCRIPTS

#### **Contact Information**

Proceedings of the National Academy of Sciences, 500 5th Street, NW, NAS 340, Washington, DC 20001 USA. Courier or express mail: PNAS, 2101 Constitution Avenue, NW, NAS 340, Washington, DC 20418 USA. Phone 1-202-334-2679, fax 1-202-334-2739, e-mail pnas@nas.edu.

## Publication Charges

#### Page charges

PNAS depends, in part, on the payment of page charges for its operation. Payment of the page charge of \$70 per printed page will be assessed from all authors who have funds available for that purpose. Payment of \$200 per article will be assessed for Supporting Information. Authors of research articles may pay a surcharge of \$1,000 to make their paper freely available through the PNAS open access option. If your institution has a 2006 Site License, the open access surcharge is \$750. All articles are free online after 6 months. Articles are accepted or rejected for publication and published solely on the

basis of merit.

#### Color charges

Payment by authors of the following additional costs is expected: \$250 for each color figure or table; \$150 for each replacement or deletion of a color figure or table; additional \$200 for each color Supporting Information item that must be scanned. A single figure is defined as original art that can be processed as a unit and printed on one page without intervening type. Requests for waiver of charges should be submitted to <a href="mailto:pnas@nas.edu">pnas@nas.edu</a>.

#### **MANUSCRIPT PREPARATION**

#### Language-Editing Services

Prior to submission, authors who believe their manuscripts would benefit from professional editing are encouraged to use language-editing services, such as the ones described at the following web sites: <a href="https://www.prof-editing.com">www.bostonbioedit.com</a>, www.internationalscienceediting.com, <a href="https://www.biosciencewriters.com">www.biosciencewriters.com</a>, and <a href="https://www.biomeditor.com">www.biomeditor.com</a>. PNAS does not take responsibility for or endorse these services, and their use has no bearing on acceptance of a manuscript for publication.

#### Submitting Manuscripts Online

Authors submitting directly (Track II) may submit Adobe Acrobat PDFs of their double-spaced papers via the web at <a href="www.PNAScentral.org">www.PNAScentral.org</a>. Source files are required for all other submissions, including Track II revisions. Members submitting papers through Tracks I and III should also submit via the web. If you are unable to submit online, please contact <a href="mailto:pnas@nas.edu">pnas@nas.edu</a>. Corresponding authors of Track I and Track III papers will be provided a URL for file submission after the member has initiated the process by providing his or her endorsement and copies of the reviews received. Supporting Information may also be submitted online. Online submission expedites the editorial process and reduces the cost and delay of photocopying and mailing.

## Digital Figures

TIFF and EPS for Macintosh or PC are the only <u>acceptable formats</u> for figures that will appear in the print journal. (See <u>Supporting Information</u> below for acceptable formats for online-only supplementary material.) All color images must be in CMYK (cyan, magenta, yellow, black) mode. Include the font files for any text. PC or Macintosh versions of <u>Adobe PostScript fonts</u> must be used (no system "bitmap" fonts). Images must be final size, preferably 1 column (8.7 cm) width. Figures wider than 1 column should be between 10.5 and 18.0 cm wide. Numbers, letters, and symbols should be at least 2 mm in size after reduction and must be consistent. Composite figures must be preassembled. Details are at <a href="https://www.pnas.org/misc/digitalart.pdf">www.pnas.org/misc/digitalart.pdf</a>. Direct questions to <a href="mailto:pnas.org/misc/digitalart.pdf">pnas.org/misc/digitalart.pdf</a>. Direct questions to <a href="mailto:pnas.org/misc

## Tables

Number tables (Arabic numerals) in the order in which they are cited in the text. Each table should have a brief title, be on a separate page, and be double-spaced.

## Supporting Information

The print version of the paper must stand on its own without the Supporting Information. Refer to Supporting Information in the manuscript at an appropriate point in the text. Number supporting figures and tables to follow all figures and tables in the main text.

Authors who place detailed materials and methods in Supporting Information must provide sufficient detail in the print edition methods to enable a reader to follow the logic of the procedures and results, and must reference the online methods. If a paper is fundamentally a study of a new method or technique, then the methods must be described completely in the print edition.

Use the following file formats for Supporting Information only:

- Text: Use Word, WordPerfect, or RTF files (PDF files are acceptable for LaTeX files).
- Figures: Provide a brief legend for each figure in a Word, WordPerfect or RTF file. Provide figure images in JPEG, GIF, or PDF files; do not save figure numbers, legends, or author names as part of the image. File sizes should not exceed 5 MB. Images should not exceed 500 pixels per inch in width or height.
- **Tables:** Supply Word, Excel, HTML, or PDF files (one table per file). Include the table title and legend in the table file. Do not use tabs or spaces to separate columns in Word or WordPerfect tables.
- Movies: Supply QuickTime-formatted files (with a .mov file name extension) or MPEG files, and submit a brief legend for each movie in a Word, WordPerfect, or RTF file. All movies should be submitted at the desired reproduction size and length. To avoid excessive delays in downloading the files, movies should be no more than 10 MB in size.
- Web pages: Provide a complete list of files and the name of the main page. Do not link to files saved in subdirectories. Acceptable formats are HTML, PDF, JPEG, GIF, plain text, and Excel.

#### Use of URLs in Text

As a publisher, PNAS must be able to archive all content necessary for the evaluation of a published article. Where such archiving is not possible, public databases, such as GenBank and others outlined in the Information for Authors, are acceptable.

Links to web sites other than a permanent public repository are not an acceptable alternative because they are not permanent archives. Links to authors' home or university pages are not permitted and will be removed from the article. The PNAS copyright assignment permits authors to post their PNAS paper and additional material on their home page after the paper is published in PNAS.

#### Journal Cover Figures

Authors are invited to submit scientifically interesting and visually arresting cover images. To view accepted cover art, please visit the PNAS cover archive at <a href="www.pnas.org/coverarchive">www.pnas.org/coverarchive</a>. Illustrations need not be reprinted in the article, but should be representative of the work. Images should be original, and copyright will transfer to PNAS. Include a brief lay-language caption (50-60 words) and credit information (e.g., Photograph courtesy of...). Images should be 21.5 cm wide by 22.5 cm high. Files should be EPS or TIFF and should be in CMYK color mode (see guidelines for digital art above). Cover figure files may be submitted online when the paper is submitted or may be sent by e-mail to <a href="mailto:pnas@nas.edu">pnas@nas.edu</a>. Send large files on CD-ROM or Zip disk by courier to the PNAS Editorial Office. For hard copies, send two glossy prints with the top indicated. Submissions should include manuscript number, author name, phone, and e-mail. Illustrations will not be returned unless requested.

## Submitting Print Manuscripts (Tracks I and III Only)

Authors should submit print manuscripts only after contacting the PNAS office. Submit two complete copies of the manuscript in final form, pages numbered, plus one set of print-quality figures, four sets of review-quality figures, and one photocopied set of figures. Include manuscript text, digital art, and Supporting Information, each on separate computer disks. Identify the platform, program, first author, date, and file name on each disk label. Also include the completed Copyright Assignment/Documentation Report Form, the character count breakdown of the final manuscript, disclosure of any associations that pose a conflict of interest, acknowledgement of all funding sources, the classification of the paper, and references according to PNAS style.

- **Text on Disk.** Print manuscripts must be accompanied by a computer disk containing the final text. The version on the disk must match the hard copy. Guidelines for papers submitted in TeX or LaTeX are at <a href="www.pnas.org/misc/texdoc.pdf">www.pnas.org/misc/texdoc.pdf</a>. Supporting Information should be on separate disks, clearly marked "Supporting Information for the Web" with the title, corresponding author's name, file names, and the name and version of programs used to create the files. Five paper copies should also be supplied, similarly marked.
- Figures. Original drawings, high-quality photographs, or laser prints are required (halftones should be high-quality originals or photographs). For color figures, submit one set of prints for the printer at final size (preferably 1 column width), or slides with a print or a color photocopy indicating magnification and cropping, and four sets of high-quality prints. Label the back of each figure with the first author's name, the figure number, the orientation (top), and the desired final size. Return of figures cannot be guaranteed.

## Manuscript Length

PNAS generally uses a two-column format averaging 60 characters, including spaces, per line. The maximum length of a research article is six printed pages or 47,000 characters, including all text, spaces, and the number of characters displaced by figures, tables, and equations. The total number of characters equals:

- The number of characters including spaces in the text (include all parts except tables), plus
- The height in cm of each figure at desired printed size x 180 for a one-column figure or x 360 for a two-column figure, **plus**
- The height in number of lines of each table x 60 for a one-column table or x 120 for a two-column table, **plus**
- A 120-character allowance for the space above and below each single column of a figure, table, or equation, plus
- An additional 60 characters for each one-column line of equation.
- A table that has lines with more than 60 characters plus spaces or a figure that is wider than 8.7 cm takes up two columns in width.

If the word processing program character count *excludes* spaces, add the word count to the character count to obtain a character count that includes spaces.

Authors will be responsible for additional charges incurred due to shortening overlong papers in proof.

## Manuscript Format

Manuscript Order | Nomenclature and Style | Abbreviations and Symbols

## Manuscript Order

The standard order of sections in the manuscript file is: title page, abstract, introduction, results, discussion, materials and methods, acknowledgements, references, figure legends, and tables.

Title Page. Include the following information on this page:

- Classification: Select a major (Physical, Biological, or Social Sciences) and a minor category
  from the following. Dual classifications are permitted between major categories and in
  exceptional cases, subject to Editorial Board approval, within a major category.
  - PHYSICAL SCIENCES: Applied Mathematics, Applied Physical Sciences, Astronomy, Chemistry, Computer Sciences, Engineering, Environmental Sciences, Geology, Geophysics, Mathematics, Physics, Statistics, and Sustainability Science.
  - BIOLOGICAL SCIENCES: Agricultural Sciences, Anthropology, Applied Biological Sciences, Biochemistry, Biophysics, Cell Biology, Developmental Biology, Ecology, Environmental Sciences, Evolution, Genetics, Immunology, Medical Sciences, Microbiology, Neuroscience, Pharmacology, Physiology, Plant Biology, Population Biology, Psychology, and Sustainability Science.
  - SOCIAL SCIENCES: Anthropology, Economic Sciences, Environmental Sciences,

Political Sciences, Psychology, Social Sciences, and Sustainability Science.

- **Title:** Titles should be simple, informative, and comprehensible for a broad scientific audience. Authors should avoid nonstandard abbreviations and colonic phrases. Titles may not be phrased as questions. Titles are limited to three lines or 135 characters including spaces.
- Author affiliation: Include department, institution, and complete address for each author. If there are authors with different affiliations, use superscripts to match authors with institutions.
- Corresponding author: The name, complete address, telephone and fax numbers, and e-mail address of the author to whom correspondence and proofs should be sent. Mailing and e-mail addresses will appear in print and online.
- Manuscript information: The number of text pages (including references and figure legends), of figures, and of tables.
- Word and character counts: The number of words in the abstract and the total number of characters in the paper.
- Abbreviations footnote: List nonstandard abbreviations used five or more times. Define these where first mentioned in the text and do not use them in the title.
- Data deposition footnote: Supply all database accession numbers and/or codes.

**Abstract**. Provide an abstract of no more than 250 words on page 2 of the manuscript. Abstracts should explain to the general reader the major contributions of the article. References in the abstract must be cited in full.

**Text.** Describe procedures in sufficient detail so that the work can be repeated. Methods must be presented after Results and Discussion. Follow the spelling and usage given in *Webster's Third New International Dictionary* or the *Random House Dictionary of the English Language*. Avoid laboratory jargon. Correct chemical names should be given and strains of organisms should be specified. Trade names should be identified by an initial capital letter with the remainder of the name lowercase. Names and addresses of suppliers of uncommon reagents or instruments should be provided. Use Système International (SI) units and symbols whenever possible. When SI units are not used, the factor for conversion should be provided on first usage.

Footnotes. Use symbols in the order \*,  $\dagger$ ,  $\ddagger$ ,  $\S$ ,  $\P$ ,  $\parallel$ , \*\*,  $\ddagger$ ,  $\ddagger$ ,  $\S$ ,  $\P$ .

Acknowledgments. List dedications, acknowledgments, and funding sources.

**References**. References must be in PNAS style. Only published or in-press papers and books may be cited in the reference list. Abstracts of papers presented at meetings are not permitted. References should be cited in numerical order as they appear in text. Because tables and figures will be inserted in the text where first cited, references in these sections should be numbered accordingly. All authors (unless there are 10 or more) should be named in the citation. If 10 or more, list the first 10 names followed by *et al.* Databases are cited in the text or as footnotes.

The corresponding author must be prepared to provide a signed authorization for the citation of unpublished data and personal communications.

Journal articles are cited as follows:

 Neuhaus, J.-M., Sitcher, L., Meins, F., Jr., & Boller, T. (1991) Proc. Natl. Acad. Sci. USA 88, 10362-10366.

For correct abbreviations of journal titles, refer to Chemical Abstracts Service Source Index (CASSI).

Articles or chapters in books are cited as follows:

14. Hill, A. V. S. (1991) in *Molecular Evolution of the Major Histocompatibility Complex*, eds. Klein, J. & Klein, D. (Springer, Heidelberg), pp. 403-420.

Figure Legends. Provide these separately from figures.

## Nomenclature and Style

International standards on nomenclature should be used. For recommended style guides, nomenclature, abbreviations, and symbols, see www.pnas.org or contact the PNAS office.

# Abbreviations and Symbols

- Table 1. Standard Abbreviations and Symbols
- Table 2. Abbreviations for units of measurement and physical and chemical quantities

The PNAS Information for Authors is published in the first print issue of the year.

[3/06]

 $\frac{Current\ Issue}{Subscribe\ |\ Advertise\ |\ Contact\ |\ Site\ Map} |\ \underline{About}$ 

Copyright © 2006 by the National Academy of Sciences

9 of 9