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## PURPOSE AND SCOPE

PNAS publishes research reports, Brief Reports, Letters, Front Matter magazine content, Commentaries, Perspectives, and Colloquium papers. In accordance with the guiding principles established by George Ellery Hale in 1914, PNAS also publishes brief first announcements of NAS members' and foreign associates' more important contributions to research and of work that appears to a member to be of particular importance. All submissions are evaluated by a member of the Editorial Board prior to acceptance. PNAS is a general science journal, and all papers should be intelligible to a broad scientific audience.

### Article Types

**Research reports** (Contributed and Direct Submissions) describe the results of original research of exceptional importance and include a Significance Statement that describes the significance of the work. Unsolicited research reports are welcome.

**Brief Reports** describe observations of immediate impact that may hold potential to initiate new avenues of research, provide compelling new data on controversies of broad interest and long-standing questions, or present a concise conceptual advance. Brief Reports are limited to 3 pages, which is approximately 1,600 words and 15 references, and typically include no more than 2 graphical elements. The word count includes manuscript text, as well as the title page, abstract, and figure legends. SI is limited to essential supporting datasets and videos (no additional methods, tables, or figures). Where appropriate, authors are encouraged to cite protocols.

Brief Reports receive an accelerated review and production process of ~3 months and are open access. Brief Reports follow the [Direct Submission](#) mode of review. Unsolicited Brief Reports are welcome.

**Letters** are brief comments that allow readers to constructively address a difference of opinion with authors of a recent PNAS article. Readers may comment on exceptional studies or point out potential flaws in studies published in the journal. Letters may not include requests to cite the Letter writer's work, accusations of misconduct, or personal comments to an author. Letters are limited to 500 words and 10 references, and must be submitted within 6 months of the publication of the subject article in *Latest Articles*. Unsolicited Letters are welcome.

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**Commentaries** call attention to articles of particular note and are written only at the invitation of the Editorial Board.

**Perspectives** present a viewpoint on an important area of research. Perspectives focus on a specific field or subfield within a larger discipline and discuss current advances and future directions. Perspectives are of broad interest to nonspecialists and may add personal insight to a field, but should be balanced and objective. Perspectives are written only at the invitation of the Editorial Board and follow the [Direct Submission](#) mode of review.

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All papers are evaluated solely on their scientific merit by peers, not by professional staff editors. A three-tier review process for research reports includes review by an Editorial Board member from one of the 31 NAS disciplines, an NAS member editor, and independent peer reviewers. NAS member editors are professional scientists and active researchers. A list of Editorial Board members and their disciplines appears on our [masthead](#).

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Authors must recommend three appropriate Editorial Board members, three NAS members who are expert in the paper's scientific area, and five qualified reviewers. The Board may choose

someone who is or is not on that list or may reject the paper without further review. Authors should indicate in their cover letter why their suggested editors are qualified to handle the paper and why any nonpreferred reviewers should be excluded. See the [directory](#) of PNAS member editors and their research interests. The editor may obtain reviews of the paper from at least two qualified reviewers, each from a different institution and not from the authors' institutions.

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**Contributed Submission.** An NAS member may contribute up to two of her or his own manuscripts for publication in PNAS each year. Contributed papers go through open peer review (named reviewers), with the administrative aspects of the review process handled by PNAS. About 25% of articles published in PNAS are contributed. To contribute a paper, the member must affirm that she or he had a direct role in the design and execution of all or a significant fraction of the work, and the subject matter must be within the member's area of expertise. Contributed articles must report the results of original research. Academy members who have a real or perceived competing interest, financial or otherwise, that could be seen to significantly impair their objectivity or to create an unfair competitive advantage for any person or organization tied to the research should consider submitting their work as a Direct Submission. The final version of the paper must be submitted by the last day of the year to count toward that year's annual limit.

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section a brief statement identifying the institutional and/or licensing committee approving the experiments. For all experiments involving human participants, authors must also include a statement confirming that informed consent was obtained from all participants, or provide a statement why this was not necessary.

All experiments must have been conducted according to the principles expressed in the [Declaration of Helsinki](#). Authors must follow the [International Committee of Medical Journal Editors' policy](#) and deposit trial information and design into an accepted clinical trial registry before the onset of patient enrollment. For animal studies, authors must report the species, strain, sex, and age of the animals.

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A length estimate is not required, but a standard 6-page article is approximately 4,000 words, 50 references, and 4 medium-size graphical elements (i.e., figures and tables). Authors writing their papers in LaTeX should use our [LaTeX template](#). Authors will need to complete the [License to Publish](#) online and provide permissions for any [previously published material](#).

**Manuscript Length.** The preferred length of articles is 6 pages, but PNAS will allow articles up to a maximum of 12 pages. A manuscript file template for Word files is [available](#). Authors writing their papers in LaTeX should use our [LaTeX template](#).

Brief Reports are limited to 3 pages, which is approximately 1,600 words (including title page, abstract, and figure legends) and 15 references, and no more than 2 graphical elements (e.g., figures and tables). SI is limited to essential supporting datasets, videos, and 3D figures (no additional methods, tables, or figures are permitted). A template for Brief Report submissions is available in [Word](#) and [LaTeX](#).

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When submitting a Contributed manuscript for review, the NAS member should supply a single PDF file containing all text, figures, tables, and SI. High-resolution files are not required until the finished manuscript is ready to be assessed by the Editorial Board. The NAS member will act as the corresponding author during the review process.

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Extensive edits will not be allowed at proofs; publication-ready files should be provided with the revised submission. Text files should be provided in Word, RTF, or LaTeX format. Tables should be included at the end of the manuscript file. Word and RTF manuscript files should not contain any embedded figures or schemes; these should be uploaded individually in TIFF, EPS, PPT, or high-resolution PDF. SI can include datasets and movies in addition to a single SI Appendix PDF. Please see the *SI* section for details.

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Proof pages	Word count	Maximum no. of figures and tables*	Maximum no. of references*
6	4,000	4	50
7	4,500	5	55
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9	5,500	7	70
10	6,000	8	75
11	6,500	9	80
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